

City of Ventura

Community Memorial Hospital District Development Code

Final

Environmental Impact Report

October 2010

Community Memorial Hospital District Development Code

***Final* Environmental Impact Report**

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October 2010

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City of Ventura
Community Memorial Hospital District Development Code

Environmental Impact Report

Table of Contents

	Page
Executive Summary	ES-1
1.0 Introduction	1-1
1.1 Environmental Impact Report Background	1-1
1.2 Purpose and Legal Authority	1-3
1.3 Scope and Content/Environmental Factors Potentially Affected	1-4
1.4 Lead, Responsible, and Trustee Agencies	1-5
1.5 Environmental Review Process... ..	1-6
2.0 Project Description.....	2-1
2.1 Project Proponent.....	2-1
2.2 Geographic Extent of the Project Area	2-1
2.3 Current Land Use and Regulatory Setting	2-6
2.4 Code Purpose.....	2-11
2.5 Physical Characteristics of Planned Development	2-13
2.6 CHM Code	2-24
2.7 Development Phasing... ..	2-25
2.8 Project Objectives	2-26
2.9 Required Approvals.....	2-26
3.0 Environmental Setting.....	3-1
3.1 Regional Setting.....	3-1
3.2 Project Area Site Setting	3-1
3.3 Cumulative Projects Setting	3-1
4.0 Environmental Impact Analysis	4-1
4.1 Aesthetics	4.1-1
4.2 Air Quality	4.2-1
4.3 Historic Resources.....	4.3-1
4.4 Noise	4.4-1
4.5 Traffic and Parking	4.5-1
4.6 Hydrology and Water Quality	4.6-1
4.7 Land Use and Planning.....	4.7-1
4.8 Water Supply	4.8-1
4.9 Greenhouse Gas Emissions.....	4.9-1
5.0 Growth Effects and Other CEQA Sections	
5.1 Growth Inducing Effects	5-1
5.2 Irreversible Environmental Effects	5-3



6.0 Alternatives	
6.1 Alternative 1: No Project	6-1
6.2 Alternative 2: Buildout Under Existing Zoning	6-1
6.3 Alternative 3: Reduced Project-Phase I Only	6-4
6.4 Alternative Sites	6-7
6.5 Environmentally Superior Alternative	6-7
7.0 References and Report Preparers.....	7-1
7.1 References.....	7-1
7.2 Report Preparers.....	7-3
8.0 Addenda and Errata/Responses to Comments	8-1
8.1 Background	8-1
8.2 Addenda and Errata/Responses to Comments	8-1

List of Figures

Figure 1-1	Environmental Review Process.....	1-7
Figure 2-1	Regional Location.....	2-2
Figure 2-2a	Project Area Location.....	2-3
Figure 2-2b	Zoning Modification Boundary	2-4
Figure 2-2c	Parcels Included in the CMH Form-Based Code.....	2-5
Figure 2-3	Existing Visual Characteristics of Project Area.....	2-7
Figure 2-4	Existing 2005 General Plan Land Use Designations	2-9
Figure 2-5	Existing Zoning	2-10
Figure 2-6	Proposed Zoning.....	2-12
Figure 2-7	Illustrative Phase I Development.....	2-14
Figure 2-8	Illustrative Phase II Development	2-15
Figure 2-9	Massing Diagram	2-16
Figure 4.1-1	Hillsides Views.....	4.1-3
Figure 4.1-2	Public Realm Regulating Plan.....	4.1-7
Figure 4.1-3	Summer Shadows – June 21 st	4.1-15
Figure 4.1-4	Winter Shadows – December 21 st	4.1-17
Figure 4.4-1	Noise Compatibility Matrix.....	4.4-3
Figure 4.5-1	Study Area Intersections	4.5-2
Figure 4.5-2	Baseline ADT Volumes.....	4.5-4
Figure 4.5-3	2025 General Plan Buildout + Project.....	4.5-17
Figure 4.5-4	Construction Staging Plan	4.5-29
Figure 4.6-1	Existing Conditions.....	4.6-3
Figure 4.6-2	Developed Conditions.....	4.6-9
Figure 4.6-3	Storm Drain Infrastructure Improvements and Watershed Areas	4.6-11
Figure 4.6-4	Stormwater Treatment Areas	4.6-15

List of Tables

Table ES-1	Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts	ES-4
------------	---	------



Table ES-2	2005 General Plan Mitigation Monitoring and Reporting Compliance	ES-15
Table 2-1	Existing Project Area Characteristics	2-8
Table 2-2	Allowed Land Uses & Permit Requirements for Hospital District Zones	2-21
Table 2-3	Development Potential.....	2-23
Table 2-4	Existing Development to be Demolished	2-24
Table 2-5	Net Increase in Hospital District Development.....	2-24
Table 3-1	Cumulative Development.....	3-2
Table 3-2	Planned and Pending Development in the Vicinity	3-3
Table 4.1-1	General Plan Implementation Analysis.....	4.1-9
Table 4.2-1	Federal and State Ambient Air Quality Standards	4.2-2
Table 4.2-2	Ambient Air Quality Data Concentrations	4.2-6
Table 4.2-3	Comparison of 2025 Population Projections	4.2-10
Table 4.2-4	Maximum Daily Construction Emissions Estimates.....	4.2-12
Table 4.2-5	Operational Emissions Estimates (lbs/day).....	4.2-15
Table 4.2-6	Construction Health Risks	4.2-18
Table 4.3-1	Historical Properties	4.3-9
Table 4.4-1	Existing Noise Levels.....	4.4-2
Table 4.4-2	City of Ventura Exterior Noise Standards.....	4.4-4
Table 4.4-3	Significance of Changes in Operational Roadway Noise Exposure	4.4-6
Table 4.4-4	Traffic Generated Noise	4.4-8
Table 4.4-5	Typical Noise Levels at Construction Sites	4.4-11
Table 4.4-6	Anticipated Noise Levels at Sensitive Receptor Location.....	4.4-11
Table 4.4-7	Parking Lot Noise Sources at 100 Feet	4.4-14
Table 4.5-1	Intersection Level of Service Descriptions.....	4.5-5
Table 4.5-2	Baseline ICU Summary	4.5-6
Table 4.5-3	Street Classifications	4.5-8
Table 4.5-4	Arterial Intersection Performance Criteria.....	4.5-9
Table 4.5-5	Summary of Existing Parking and Utilization.....	4.5-11
Table 4.5-6	Land Use and Trip Generation Comparison 2005 General Plan vs. CMH Code	4.5-12
Table 4.5-7	Project Trip Generation	4.5-14
Table 4.5-8	Intersection ICU and LOS Summary General Plan Buildout Year 2025.....	4.5-18
Table 4.5-9	Intersection ICU and LOS Summary Existing + Project.....	4.5-20
Table 4.5-10	CMH Code Parking Demand	4.5-25
Table 4.5-11	Alternative Transportation Policy Consistency.....	4.5-31
Table 4.6-1	Existing Watersheds and Peak Runoff Volumes	4.6-1
Table 4.6-2	Redeveloped Watersheds and Peak Runoff Volumes	4.6-7
Table 4.8-1	Historic and Projected Water Source Supply Availability (Acre Feet)	4.8-2
Table 4.8-2	Projected Service Area Water Demand (Acre Feet) (Normal Year, Weatherwise)	4.8-3
Table 4.8-3	Projected Service Area Surplus (AFY) (Normal Year, Weatherwise) ..	4.8-3
Table 4.8-4	Single and Multiple Dry Year Supply Reliability and Demand Comparison (Acre Feet)	4.8-5
Table 4.8-5	Summary of Projected Single Dry Water Year Demand and Supply	



	(Five Year Increments in Acre Feet)	4.8-6
Table 4.8-6	Summary of Projected Multiple-Dry Three Year Water Demand and Supply(Five Year Increments in Acre Feet)	4.8-6
Table 4.8-7	Projected Net Increase in Water Demand	4.8-9
Table 4.9-1	CAPCOA Suggested Thresholds for Greenhouse Gases	4.9-9
Table 4.9-2	Estimated Annual Construction Emissions of Greenhouse Gases	4.9-13
Table 4.9-3	Phase I Estimated Electricity Consumption	4.9-14
Table 4.9-4	Phase II Estimated Electricity Consumption.....	4.9-14
Table 4.9-5	Phase I Estimated Annual Operational Emissions of Greenhouse Gases	4.9-15
Table 4.9-6	Phase II Estimated Annual Operational Emissions of Greenhouse Gases	4.9-15
Table 4.9-7	Phase I Estimated Annual Mobile Emissions of Greenhouse Gases	4.9-16
Table 4.9-8	Phase II Estimated Annual Mobile Emissions of Greenhouse Gases	4.9-16
Table 4.9-9	Phase I Combined Annual Emissions of Greenhouse Gases.....	4.9-17
Table 4.9-10	Phase II Combined Annual Emissions of Greenhouse Gases	4.9-17
Table 4.9-11	CMH Code Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies	4.9-19
Table 4.9-12	CMH Code Consistency with OPR Guidance	4.9-23
Table 5-1	Estimated Employee Generation	5-2
Table 6-1	Project vs. Alternative 3 Increase in Potential Development.....	6-5
Table 6-2	Phase I Operations Emissions Estimates (lbs/ day)	6-5
Table 6-3	Phase I vs. Phase II Average Daily and Peak Hour Traffic.....	6-6
Table 6-4	Comparison of the Environmental Impacts of Project Alternatives.....	6-8

Appendices

Appendix A:	Initial Study
	Notice of Preparation
	Responses to the Notice of Preparation
Appendix B:	Parcel Details
	Emergency Room Description
Appendix C:	Air Quality Modeling Results
	Ordinance 93-37
Appendix D:	Historic Report
Appendix E:	Noise Measurement and Modeling
Appendix F:	Traffic Information
Appendix G:	Development Code
Appendix H:	Preliminary Hydrology and Hydraulic Report
Appendix I:	Phase I Archaeological Study
Appendix J:	Water Supply Assessment
Appendix K:	Phase I Environmental Site Assessment
Appendix L:	Mitigation Monitoring and Reporting Program

EXECUTIVE SUMMARY

This document constitutes the FEIR to be presented to the City of Ventura Planning Commission for review and recommendation to the City Council for certification prior to decisions by the City Council on acceptance and approval of the Community Memorial Hospital Development Code. Changes made to the document subsequent to public review (August 13, 2010 through September 27, 2010) are shown in ~~strike through~~ and underline format.

A Draft EIR was circulated for public review from March 22, 2010 until May 19, 2010. The city received ten comment letters on the Draft EIR. Based on the comments received, City staff determined that the responses included potentially significant new information related to potential environmental impacts. Consequently, based on the requirements of CEQA Guidelines Section 15088.5, this Draft EIR ~~is being~~ was recirculated to allow for additional public review of the new information. This revised and recirculated document, ~~which~~ supersedes in its entirety the Draft EIR circulated from March 22nd to May 19th. This recirculated Draft EIR includes new information and analysis that addressed s relevant comments on the previously circulated Draft EIR. Although the comment letters submitted in response to the original Draft EIR will be part of the administrative record for the project, pursuant to CEQA Guidelines Section 15088.5(f)(1) the City ~~will~~ only be responding to comments submitted in response to this recirculated Draft EIR. Seven comment letters were received during the 45-day review period (August 13, 2010 through September 27, 2010), which are included in Section 8.0 Addenda and Errata/Responses to Comments. Pursuant to CEQA Guidelines Section 15088.5(g), a summary of the revisions to the Draft EIR made between public review periods are detailed in Section 1.0, *Introduction*.

This section summarizes the characteristics of the proposed Community Memorial Hospital District Development Code, alternatives, environmental impacts associated with the code, recommended mitigation measures, and the level of significance of impacts after mitigation.

PROJECT SYNOPSIS

Project Proponent

Community Memorial Health System
147 North Brent Street
Ventura, CA 93003

Project Description

The proposed Project involves the adoption of the Community Memorial Hospital District Development Code (CMH Code) to guide redevelopment of about 10 acres within the Midtown portion of the City. The Project would be constructed in two phases.

It is anticipated that development under the CMH Code would occur in phases, as described below.

Phase I: Phase I would occur from 2010 to 2014 and would include demolition of nine Project Area structures (45,506 sf of commercial/medical



office use and 4 single family residences), construction of the new hospital building (356,000 sf and a net increase of 10 beds), adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse), abandonment of portions of existing streets and streetscapes, streetscape improvements, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the plan area would be consolidated and restriped with the addition of a 3,900 sf retail liner building (Building 18), which would be constructed adjacent the location of the future new garage and opposite the hospital open space plaza.

Phase II: Phase II would occur over a period of years and would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, buildings 11, 12, 13, 14, 15, 16 & 17 (as shown on Figure 2-9 and in Table 2-3), and the parking garage would be constructed during Phase II. Phase II development is estimated to be about 162,950 square feet of medical office uses (see Table 2-3).

The CMH Code would require the following discretionary approvals from the City of Ventura:

Discretionary approval is not required from any agency except for the City of Ventura.

- *Certification of the Final EIR*
- *Adoption of the Community Memorial Hospital District Development Code*
- *Modification of the Midtown Corridors Development Code to:*
 - Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the area covered by the Midtown Corridors Development Code
 - Designate open space in the area still to be governed by the Midtown Corridors Development Code
 - Add a shopfront overlay frontage type to interior street and open space frontages in the area still to be governed by the Midtown Corridors Development Code
 - Remove the terminated vistas designation from Borchard Street in the area still to be governed by the Midtown Corridors Development Code
- *Zone Change from Hospital (H), Professional Office (P-O), and Urban Center Zone (T5.2) to Hospital District (SD:H1) and Open Space (OS)*



- *Site Plan approval of the hospital building and other buildings to be constructed in Phase I of the proposed project (which would complete the approval of Phase I subject to design review).*
- *Design Review of the hospital building and other buildings to be constructed in Phase I of the proposed project*
- *A Memorandum of Understanding between the City and Community Memorial Health System*
- *City Council approval of the Water Supply Assessment*

ALTERNATIVES

As required by Section 15126.6 of the *CEQA Guidelines*, this section of the EIR examines a range of reasonable alternatives to the Project. Per Section 15126.6, the purpose of the alternatives analysis in EIRs is to identify alternatives that would attain most of the objectives of a proposed project, but that “would avoid or substantially lessen any of the significant effects of the project...” Based on the analysis in Section 4.0, *Environmental Impact Analysis*, the proposed Project would not result in any unavoidably significant impacts. Thus, consideration of alternatives is not needed in order to address significant environmental effects. Nevertheless, the following three alternatives have been evaluated:

- *Alternative 1: No Project (no development - no change to existing land uses)*
- *Alternative 2: Buildout Under Existing Zoning*
- *Alternative 3: Reduced Project, Phase I Only*

The No Project Alternative is environmentally superior because it would have no impacts; however, the No Project alternative would not meet the Project Objectives. The No Project alternative would not construct a seismically conforming hospital building, would not modernize the hospital or consolidate operations with reuse of the existing hospital facility would not redevelop the Hospital Triangle in a manner that integrates open space, or activates the public realm. In addition, the No Project alternative would not manage and expand parking facilities in a manner that prevents impacts to pedestrians and surrounding neighborhoods.

Alternative 2, buildout under the existing zoning may not be feasible, since it may not be possible for CMH to suspend the current hospital operation and reopen in 2014 upon completion of a new building that requires demolition of the existing building. Alternative 2 is infeasible from a public policy and social perspective. Western Ventura County has three major providers of hospital services, including CMH (the other two are St. John's and Ventura County Medical Center). In 2008, CMH provided 52,117 “patient days.” St. John's provided 53,872 patient days, and VCMC 44,971. Additionally, all three hospitals have comparable licensed beds: 220 for CMH, 266 for St. John's, and 229 for VCMC. Because of CMH's high patient days and the comparable beds at each hospital, the other two hospitals in Western Ventura County do not have the capacity to absorb the demand of patient days at CMH for the period required to implement Alternative 2 (approximately 44 months). Additionally, physicians and hospital staff would be greatly disrupted under Alternative 2's construction period, including a substantial loss of employment opportunities at CMH for the Alternative 2 construction period.

Among the development alternatives, Alternative 3 would be the environmentally superior alternative due to the reduction of air quality, noise and traffic/parking impacts associated with the Project, mostly due to the elimination of Phase II (162,950 sf of medical office use). However, Alternative 3, Phase I Only, would not preclude additional buildout of the area under the Midtown Corridors Code. Moreover, it should be noted that with mitigation, impacts identified for the proposed Project (CMH Code) would not be significant. It should also be noted that Alternative 3 would not meet the Project objectives, particularly those related to parking and activation of the public realm.

AREAS OF PUBLIC CONTROVERSY

During the scoping meeting, the following concerns were expressed by scoping meeting participants.

- *Traffic impacts at the intersection of Main Street at Borchard Drive*
- *Short term impacts to parking during construction activities*
- *Long term impacts to parking as the Hospital District builds out*

In addition, in response to the Notice of Preparation, letters were received from the San Buenaventura Conservancy, Caltrans, the Watershed Protection District, and the Sheetmetal Workers Union. Caltrans expressed concern regarding any potential relocation of the existing heliport, while the Watershed Protection District expressed concern regarding the potential for impacts to their storm drain conveyance infrastructure. The Sheetmetal Worker's Union requested to be on the list of recipients for public notices and copies of the environmental document.

Lastly, the San Buenaventura Conservancy expressed concerns about the scoping meeting notification process and completion of a historic resources survey for Main Street properties more than 40 years old.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-1 lists the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts. Impacts are categorized by classes. Class I impacts are defined as significant, unavoidable adverse impacts, which require a statement of overriding considerations pursuant to Section 15093 of the *CEQA Guidelines* if the project is approved. No Class I impacts were identified for the Project. Class II impacts are significant adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *CEQA Guidelines*. Class III impacts are adverse, but less than adopted significance thresholds. Class IV effects are those where there is no impact or the effect would be beneficial.

Table ES-1
Summary of Project Impacts and Mitigation Measures

Impact	Mitigation Measure	Residual Significance
AESTHETICS		
Impact AES-1 Phase I and Phase II development under the CMH Code would facilitate construction of buildings that could be larger in size and massing than existing buildings, thus altering the visual character of the Hospital District. However, the 2005 General Plan found that intensification and reuse would generally enhance visual character by adding appropriately scaled infill development. Intensification would also be consistent with the Midtown Corridors Code and would not create an aesthetically offensive condition or substantially degrade the existing visual character of the community. Thus, the impact with respect to visual character would be Class III, less than significant.	None Necessary	Less than significant
Impact AES-2 Phase I and Phase II development that would be facilitated by the CMH Code could affect hillside views as seen from the Five Points intersection, but would not affect views from North Brent Street. In addition, development under the Code would create a new north-south viewing corridor along the Borchard Street Extension from which hillside views would be visible. Impacts to viewsheds would be Class III, less than significant.	none	Less than significant
Impact AES-3 The Hospital District is currently developed and there are existing sources of nighttime lighting along streets, from buildings and within parking lots. In addition, daytime glare is associated with parked cars and building windows. Phase I and Phase II development under the CMH Code would increase building density and building heights. However, the proposed CMH Code would not facilitate development that would adversely affect daytime or nighttime views, and redevelopment would preserve solar access for surrounding development. The impact with respect to light, glare and solar access would be Class III, less than significant.	none	Less than significant

**Table ES-1
Summary of Project Impacts and Mitigation Measures**

Impact	Mitigation Measure	Residual Significance
AIR QUALITY		
Impact AQ-1 Phase I and Phase II redevelopment under the CMH Code would be consistent with the 2005 Ventura General Plan and the Ventura County AQMP population forecasts. Therefore, impacts related to the consistency with the AQMP are Class III, less than significant.	None necessary	Less than significant
Impact AQ-2 Construction of individual projects accommodated under the CMH Code, including the new hospital building, would result in emissions of air pollutants. The Ventura County APCD has not adopted significance thresholds for construction impacts because of they are not permanent; therefore, impacts are Class III, less than significant. Nevertheless, standard conditions of approval are required by the City to reduce dust and ozone precursors during construction.	None necessary See AQ-2 Condition of Approval following Table ES-1	Less than significant
Impact AQ-3 Phase I and Phase II development facilitated by the proposed CMH Code would generate air pollutant emissions. Phase I emissions would not exceed VCAPCD thresholds; however, combined Phase I and Phase II emissions would exceed the VCAPCD thresholds for ROG and NOx. Increasing energy efficiency and payment of fees pursuant to Ordinance 93-37 would mitigate the impact. This is a Class II, significant but mitigable impact.	AQ-3(a) Increase Energy Efficiency. For all new construction, increase energy efficiency by 20% beyond Title 24 requirements. AQ-3(b) Air Quality Mitigation Fees. Phase I and II developers within the Hospital District shall contribute fees to the Citywide Transportation Demand Management Program for respective incremental contributions to air quality emissions in excess of 25 lbs/day threshold prior to occupancy. Fees shall be based and paid in accordance with Ordinance 93-37.	Less than significant
Impact AQ-4 The health risks associated with onsite grading would not exceed the health risk assessment criteria for sensitive receptors in the vicinity of the Project Area. This is a Class III, less than significant impact.	None necessary	Less than significant with City Standard Condition AQ-2
HISTORIC RESOURCES		
Impact HR-1 Construction under the CMH Code would involve demolition of nine structures under Phase I, none of which has been identified as eligible for historical listing. One property in the vicinity of the Hospital District is potentially eligible for Landmark status;	None required	Less than significant



**Table ES-1
Summary of Project Impacts and Mitigation Measures**

Impact	Mitigation Measure	Residual Significance
however, Phase I and Phase II development facilitated by the CMH Code would not significantly affect this property. Therefore, impacts would be Class III, less than significant.		
NOISE		
Impact N-1 Phase I and Phase II growth facilitated by the CMH Code would increase traffic-related noise. Traffic noise increases due to development facilitated by the CMH Code would not exceed FTA standards. Therefore, impacts would be Class III, less than significant.	None necessary	Less than significant
Impact N-2 Construction of individual projects under Phase I and Phase II of the CMH Code could intermittently generate high noise levels. This may affect sensitive receptors near construction sites. However compliance with Noise Ordinance restrictions on construction timing would reduce this impact to a Class III, less than significant level. Nevertheless, mitigation is recommended to reduce noise generated during construction.	None necessary See N-2 Condition of Approval following Table ES-1	Less than significant
Impact N-3 No residential uses are currently proposed; however, residential uses are an allowable use under the CMH Code. The potential future development of residential uses under Phase II in close proximity to commercial uses and parking structures could potentially expose sensitive receptors to normally unacceptable noise levels. With Mitigation Measure N-3, this is a Class II, significant but mitigable, impact.	N-3 Acoustical Analyses. Acoustical analyses shall be conducted for new residential developments within the Hospital District and shall incorporate mitigation necessary to ensure that: <ul style="list-style-type: none"> • Exterior noise in exterior spaces of new residences and other noise sensitive uses that are used for recreation (such as patios and gardens) does not exceed 65 dBA CNEL; and • Interior noise in habitable rooms of new residences does not exceed 45 dBA CNEL with all windows closed. 	Less than significant
Impact N-4 Hospital development would involve the potential for noise generated by stationary equipment such as cooling towers, HVAC systems, emergency generators as well as other types of equipment. Compliance with municipal code requirements would result in a Class III, less than significant impact.	None necessary	Less than significant

**Table ES-1
Summary of Project Impacts and Mitigation Measures**

Impact	Mitigation Measure	Residual Significance
TRAFFIC AND PARKING		
Impact T-1 Buildout of Phase I and Phase II Project-generated traffic would not cause the LOS at study area intersections to decline below allowable standards. Therefore, traffic impacts would be Class III, less than significant. Nevertheless, the project would add traffic to the City and County roadway network and developers, including CMH would need to pay applicable traffic impact mitigation fees in accordance with City and County requirements.	None necessary See T-1 Condition of Approval following Table ES-1	Less than significant
Impact T-2 Phase I and Phase II development under the proposed CMH Code would alter the existing street network and circulation system within the Hospital District. The CMH Code would generally improve circulation and would not create hazards due to design features or inadequate emergency access. This is a Class III, less than significant, impact.	None necessary	Less than significant
Impact T-3 The Hospital District contains adequate parking for construction of the new hospital and reuse of a portion of the old hospital (part of Phase I); however, additional parking will be required to satisfy demands associated with full buildout of the District (remainder of Phase I and Phase II). Therefore, parking demand could exceed the available supply. This is a Class II, significant but mitigable, impact.	T-3 Parking Supply. Reuse of the existing hospital building and new buildings proposed on CMH property and within the CMH District would be subject to compliance with the off-street parking requirements. In order to provide adequate parking for each building pursuant to the Parking Demand Rates of the Community Memorial Hospital District Development Code, parking shall be provided (A) on-site or (B) within 1,250 feet of the hospital if a parking availability study for the building(s) indicates that there will be a sufficient amount of parking spaces. Off-site parking located further than 1,250 feet may be allowed if the following conditions are met: (A) the off-site parking is approved by the Community Development Director; (B) a parking availability study confirms that the off-site parking will provide sufficient parking spaces. On- or off-site (whether within 1,250 feet or not) parking management strategies may include a Transportation Demand Management (TDM) Program. Details of the specifics of the TDM program along with the anticipated reductions in parking shall be reviewed and approved by the Community Development Director.	Less than significant



**Table ES-1
Summary of Project Impacts and Mitigation Measures**

Impact	Mitigation Measure	Residual Significance
<p>Impact T-4 Construction activities have the potential to disrupt travel patterns, reduce available parking, and spill over into public and private areas in the vicinity of the District during both Phase I and Phase II. This is a Class II, significant but mitigable impact.</p>	<p>T-4 Construction Traffic Impact Mitigation Plan. The applicant shall prepare, implement, and maintain a Construction Impact Mitigation Plan, which shall be designed to:</p> <ul style="list-style-type: none"> • Prevent material traffic impacts on the surrounding roadway network. • Minimize parking impacts both to public parking and access to private parking. • Ensure safety for both those constructing the project and the surrounding community. • Prevent truck traffic through residential neighborhoods. <p>The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Public Works Department, Fire, Planning and Community Development and Police to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to commencement of any construction staging for the project. It shall at a minimum, include the following:</p> <p>Ongoing requirements throughout the duration of construction:</p> <ul style="list-style-type: none"> • A detailed traffic control plan for work zones shall be maintained which includes at a minimum accurate existing and proposed: parking and travel lane configurations; warning, regulatory, guide and directional signage; and area sidewalks, bicycle lanes and parking lanes. The plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans must be reviewed and approved by the Public Works Department prior to commencement of construction and implemented in accordance with this approval. • Work within the public right-of-way shall be performed between 9:00 A.M. and 4:00 P.M., including: dirt and demolition material hauling and construction material delivery. • Trucks shall only travel on a City approved construction route. Truck queuing/staging shall not be allowed on City Streets. Limited queuing may occur on the construction site itself. 	



**Table ES-1
Summary of Project Impacts and Mitigation Measures**

Impact	Mitigation Measure	Residual Significance
	<ul style="list-style-type: none"> Materials and equipment should not be visible to the public; the preferred location for materials is to be on-site, without storage in the public right-of-way. Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City. <p>Project Coordination Elements that shall be implemented prior to commencement of construction:</p> <ul style="list-style-type: none"> Advise the traveling public of impending construction activities (e.g. information signs, portable message signs, media listing/notification, implementation of an approved traffic control plan. Timely notification of construction schedules to all affected agencies (e.g. Gold Coast Transit, Police Department, Fire Department, Public Works Department, and Planning and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet. Coordination of construction work with affected agencies in advance of start of work. Approval by the Public Works Department of any haul routes, for earth, concrete or construction materials and equipment handling. 	
Impact T-5 The CMH Code would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks). The impact would be Class III, less than significant.	None necessary	Less than significant
HYDROLOGY AND WATER QUALITY		
Impact HYD-1 Phase I and Phase II development under the CMH Code would involve reconfiguration of the existing watershed areas and Project Area drainage system. Post developed runoff volumes do not exceed pre-developed redeveloped runoff volumes; however, infrastructure upgrades will be necessary. This is a Class II,	HYD-1 Storm Drain System Improvements. Phase I redevelopment of the site shall include storm drain infrastructure upgrades necessary to ensure that storm water discharges from Phase I and Phase II redevelopment do not exceed the capacity of existing facilities. Improvements shall include the installation of a 36-inch storm drain in the alley as well as catch basins and additional infrastructure upgrades as necessary, in	Less than significant



Table ES-1
Summary of Project Impacts and Mitigation Measures

Impact	Mitigation Measure	Residual Significance
significant but mitigable impact.	accordance with the Jensen Design & Survey, Inc. November 2009 report, or as superseded by any subsequent updates. Improvements shall be approved by the Public Works Department, prior to commencement of grading or site improvements.	
Impact HYD-2 Phase I and Phase II development under the CMH Code could incrementally increase the generation of urban pollutants in surface runoff. Point and non-point sources of contamination could affect water quality downstream. However, implementation of existing regulatory requirements in combination with proposed improvements would reduce impacts to a Class III, less than significant, level.	None necessary	Less than significant
Impact HYD-3 Construction activities have the potential to contribute sediment and urban pollutants to downstream waterways. However, implementation of existing regulatory requirements reduces impacts to a Class III, less than significant, level.	None necessary	Less than significant
LAND USE		
Impact LU-1 The proposed Community Memorial Hospital District Development Code would not physically divide an established community and would be consistent with the Midtown Corridors Development Code. This is a Class III, less than significant, impact.	None necessary	Less than significant
Impact LU-2 The proposed Community Memorial Hospital District Development Code is consistent with and implements policies and actions of the 2005 General Plan, in particular the applicable land use and corridor designations. The CMH Code provides development standards specific to the Hospital District area that would not conflict with other regulatory planning documents. The CMH Code is also consistent with the General Plan's growth projections and implementation policies. This is a Class III, less than significant, impact.	None necessary	Less than significant
Impact LU-3 The Hospital District is not subject to any habitat or natural community conservation plan. This is a Class III, less than significant, impact.	None necessary	Less than significant



**Table ES-1
Summary of Project Impacts and Mitigation Measures**

Impact	Mitigation Measure	Residual Significance
<i>WATER SUPPLY</i>		
Impact WS-1 The proposed project would increase water demand, with a net increase of 15.5 acre-feet per year (AFY) during Phase I and a net increase of 12.1 AFY during Phase II, for a total of 27.6 AFY. Projected supplies are sufficient to serve an additional 27.6 AFY through 2030 under normal, single dry and multiple dry year conditions. Therefore, impacts would be Class III, less than significant.	None necessary	Less than significant
<i>GREENHOUSE GASES</i>		
Impact GCC-1 Development of Phase I and II under the CMH Code would generate GHG emissions; however, the emissions would not exceed the City's selected numeric significance threshold, derived from the January 2008 CAPCOA white paper. To further reduce GHG emissions, the project would include CAPCOA's Level 1 mitigation measures. The project's impacts on global climate change would be Class III, less than significant.	None necessary See GCC-1 Condition of Approval following Table ES-1	Less than significant
Impact GCC-2 The proposed CMH Code is consistent with the GHG reduction strategies and measures in the Climate Action team report, OPR guidance document, and CEQA Guidelines. The proposed hospital expansion is consistent with the Green Guide for Health Care. The CMH Code's impacts related to the project's consistency with plans designed to reduce GHG emissions are Class III, less than significant.	None necessary	Less than significant

CONDITIONS OF APPROVAL

- T-1 Traffic Impact Fees.** CMH and any additional developers within the CMH District shall pay applicable City and County traffic impact fees in accordance with adopted policies for fair share ADT attributed to each development. Payment of fees shall occur prior to issuance of a building permit or prior to occupancy for each developer within the CMH District.



AQ-2 Construction Air Quality. The Ventura County Air Quality Assessment Guidelines (October 2003) recommend various techniques to reduce construction-related emissions associated with individual developments. Individual developers within the Hospital District, including the Hospital, shall include techniques to limit emissions of both ozone precursors (NO_x and ROC), diesel PM and fugitive dust (PM₁₀) in compliance with AQMD Rule 55 and ARB adopted ATCM (13 CCR § 2449.2). At a minimum, these measures shall include, but not be limited to the following as identified below:

- Use Tier 2 or Tier 3 engines
- Contract with an off-road construction equipment provider that has documented compliance with Air Toxics Control Measure (ATCM) PM reduction goals in response to the California Air Resources Board adopted ATCM (13 CCR § 2449.2)
- *Minimize equipment idling time.*
- *Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.*
- *Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.*
- *Use catalyzed diesel particulate filters and low-sulfur diesel fuel*
- *The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to reduce dust.*
- *Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.*
- *Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:*
 - a) *All trucks shall be required to cover their loads as required by California Vehicle Code §23114.*
 - b) *All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.*
- *Graded and/or excavated inactive areas of the construction site shall be monitored by the City Building Inspector at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass*

growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.

- *Signs shall be posted on-site limiting traffic to 15 miles per hour or less.*
- *During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.*
- *Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.*
- *Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.*

N-2 Construction Noise. Though no significant construction-related noise impacts are required, the following noise reduction techniques are recommended to further reduce construction generated noise. Prior to issuance of any Grading, Building Permit or start of construction, the Applicant shall provide, to the satisfaction of the City's Building Official, a Noise Mitigation and Monitoring Program. Such plan shall ensure that the proposed project provides the following:

- *Construction contracts shall specify that all construction equipment, fixed or mobile, shall to the extent feasible be equipped with mufflers maintained according to manufacturer's specifications and other state required noise attenuation devices.*
- *Property owners and occupants located within 0.25-mile of the Project construction site shall be sent a notice, at least 15 days prior to commencement of construction, regarding the construction schedule of the proposed Project. A sign, legible at a distance of 50 feet, shall also be posted at the Project construction site. All notices and signs shall be reviewed and approved by the City's Building Official, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide the contact name and a telephone number of the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints.*
- *The Applicant shall provide, to the satisfaction of the City's Building Official, a qualified "Noise Disturbance Coordinator" who shall be responsible for receiving, registering, and responding to any complaints about construction noise. When a complaint is received, the Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City's Building Official. All notices that are*

sent to residential units within 0.25-mile of the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Disturbance Coordinator.

- *Prior to issuance of a Grading, Building Permit or start of construction, the Applicant shall demonstrate to the satisfaction of the City's Building Official how construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.*
- *During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.*

GCC-1 Global Climate Change. The following design features shall be incorporated.

- *New buildings within the Hospital District will have bicycle parking;*
- *The Hospital District includes transit stops for planned routes;*
- *New buildings within the Hospital District will utilize Energy Star roofs and Energy Star appliances;*
- *New buildings within the Hospital District will comply with Title 24*

BIO-1 Nesting Birds. Proposed project activities (including disturbances to native and non-native vegetation, structures and substrates) should take place outside of the breeding bird season which generally runs from March 1- August 31 (as early as February 1 for raptors) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86).

If avoidance of the breeding bird season is not feasible, the Department recommends that beginning thirty days prior to the disturbance of suitable nesting habitat the project proponent should arrange for weekly bird surveys to detect protected native birds occurring in the habitat that is to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors) as access to adjacent areas allows.

The surveys should be conducted by a qualified biologist with experience in conducting breeding bird surveys. The surveys should continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of clearance/construction work.

If a protected native bird is found, the project proponent should delay all clearance/construction disturbance activities within 300 feet of suitable nesting habitat (within 500 feet for suitable raptor nesting

habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests.

If an active nest is located, clearing and construction within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing marking the protected area 300 feet (or 500 feet) from the nest. Construction personnel should be instructed on the sensitivity of the area.

The project proponent should record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds.

Initial Study

- ARCH-1 Pre-Construction Training.** Prior to any earth disturbance or grading, a professional archaeologist shall be retained by the developer to address machinery operators and their supervisors by giving an on-site talk to the peoples who will perform the actual earth-moving activities. This will alert the operators to the potential for finding historic or pre-historic cultural resources.
- ARCH-2 Archaeological Resources.** Should unanticipated cultural resource remains (cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits) be encountered during land modification activities, work must cease, and the Planning Director shall be contacted immediately. The developer shall retain a qualified archaeologist to oversee handling of the resources in coordination with the Ventura County Archaeological Society and Native American organizations as appropriate.
- ARCH-3 Human Remains.** If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered

remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of the Native American Heritage Commission

Table ES-2
2005 General Plan
Mitigation Monitoring and Reporting Compliance

MITIGATION MEASURE	COMPLIANCE
<p>AQ-2 Additional Air Quality Actions. The following actions should be added to the 2005 General Plan to address air quality impacts of future development on a case-by-case basis:</p> <ul style="list-style-type: none"> Require air quality analysis of individual development projects in accordance with the most current version of the Ventura County Air Pollution Control District Air Quality Assessment Guidelines and, when significant impacts are identified, require implementation of air pollutant mitigation measures determined to be feasible at the time of project approval. In accordance with Ordinance 93-37, continue to require payment of fees to fund regional transportation demand management (TDM) programs for all projects generating emissions in excess of Ventura County APCD thresholds. 	<p><i>Though the mitigation measure applies to the General Plan, it is implemented for this project pursuant to the analysis in Section 4.2, Air Quality and through mitigation measures AQ-3(a-b).</i></p>
<p>AQ-3 Construction Mitigation. The following actions should be added to the 2005 General Plan to address air quality impacts of future construction projects on a case-by-case basis.</p> <ul style="list-style-type: none"> Require individual construction contractors to implement the construction mitigation measures included in the most recent version of the Ventura County APCD's Ventura County Air Quality Assessment Guidelines and when significant impacts are identified require implementation of air pollutant mitigation measures determined to be feasible at the time of project approval. 	<p><i>Though the mitigation measure applies to the General Plan, it is implemented for this project pursuant to the analysis in Section 4.2, Air Quality and through Condition of Approval AQ-2.</i></p>
<p>HWQ-2 Additional Drainage Actions. The following actions shall be added to the 2005 General Plan to address existing storm drain deficiencies.</p> <ul style="list-style-type: none"> Develop a financing program for the replacement of failing corrugated metal storm drain pipes in the City. Adopt assessment districts or other financing mechanisms to address storm drain deficiencies in areas where new development is anticipated and deficiencies exist (e.g. Downtown district, Ventura Avenue corridor, and Harbor district). 	<p><i>The first, second and fourth bullets of this mitigation measure are not applicable to the project. The project complies with the third bullet as discussed in Section 4.6 Hydrology and Water Quality. The project also implements identified storm drain improvements through mitigation measure HYD-1.</i></p>



Table ES-2
2005 General Plan
Mitigation Monitoring and Reporting Compliance

MITIGATION MEASURE	COMPLIANCE
<p>The following actions are recommended to minimize the impact of future development on the local storm drain system and implement City goals regarding sustainable infrastructure:</p> <ul style="list-style-type: none"> As feasible, require new developments to incorporate stormwater treatment practices that allow percolation to the underlying aquifer and minimize offsite surface runoff. Such methods may include, but are not limited to, (1) the use of pervious paving material within parking lots and other paved areas to facilitate rainwater percolation; and (2) construction of retention/detention basins to limit runoff to pre-development levels and to encourage infiltration into the groundwater basin. Where deemed appropriate, condition new developments adjacent to Ventura County Watershed Protection District channels to dedicate necessary right-of-way to meet future district needs. 	
<p>TC-1 Additional Circulation Actions. The following actions shall be added to the 2005 General Plan to ensure that traffic impacts of future developments are addressed and mitigated:</p> <ul style="list-style-type: none"> Require project proponents to analyze traffic impacts and implement mitigation as appropriate prior to development. Depending upon the nature of the impacts and improvements needed, mitigation may either consist of implementing needed physical improvements, contributing “fair share” fee toward implementation of needed improvements, or some combination thereof. Update the traffic mitigation fee program to fund necessary citywide circulation and mobility system improvements needed in conjunction with new development. 	<p><i>Though the mitigation measure applies to the General Plan, the first bullet is implemented for this project pursuant to the analysis in Section 4.5, Traffic and Parking. The second bullet directs the City to update the traffic mitigation fees, which is not applicable to the project; however, the project fee payment is implemented through Condition of Approval T-1.</i></p>
<p>U-1 Water System Analysis. The following action should be added to the 2005 General Plan:</p> <ul style="list-style-type: none"> Require project proponents to conduct evaluations of the existing water distribution system, pump station, and storage requirements for the proposed development in order to determine if there are any system deficiencies or needed improvements for the proposed development. 	<p><i>Though the mitigation measure applies to the General Plan, it is implemented for this project pursuant to the analysis in Section O. of the Initial Study (Utilities), the Water Supply Assessment (Appendix J) and in Section 4.8, Water Supply.</i></p>



Table ES-2
2005 General Plan
Mitigation Monitoring and Reporting Compliance

MITIGATION MEASURE	COMPLIANCE
<p>U-2 Sewer System Analysis. The following action should be added to the 2005 General Plan:</p> <ul style="list-style-type: none">• Require project proponents to conduct sewer collection system analysis to determine if downstream facilities are adequate to handle the proposed development.	<p><i>Though the mitigation measure applies to the General Plan, it is implemented for this project pursuant to the analysis in Section O. of the Initial Study (Utilities).</i></p>



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1.0 INTRODUCTION

This document is a recirculated Draft Environmental Impact Report (EIR) for the proposed Community Memorial Hospital District Development Code (“CMH Code”), located in the City of Ventura, County of Ventura.

This section describes: (1) the general background of the project’s EIR process; (2); the purpose and legal authority of the EIR (3) the scope and content of the EIR; (4) lead, responsible, and trustee agencies; and (5) the environmental review process required under the California Environmental Quality Act (CEQA).

1.1 ENVIRONMENTAL IMPACT REPORT BACKGROUND

1.1.1 Master Plan Development/EIR Scoping

Prior to preparing the Development Code, the Moule & Polyzoides consultant team conducted a charrette to gather and incorporate stakeholder and public input. The charrette was conducted on April 21st through April 25th, 2008 to generate the primary content for the Development Code. Attendees included the consultant team, representatives from the City of Ventura, Community Memorial Hospital executives, and members of the public. The feedback and results gained from the charrette were incorporated into the Master Plan and the Development Code. The Master Plan continues to evolve in response to comments from staff, the public and design progressions; however, the preliminary Master Plan is contained for reference in Appendix G.

The City of Ventura prepared a Notice of Preparation (NOP) for an environmental impact report and distributed the NOP for agency and public review for the required 30-day review period from September 21, 2009 to October 20, 2009. During that time, the City received comment letters from agencies and members of the public. The NOP is presented in Appendix A, along with the Initial Study that was prepared for the project.

A public scoping meeting was held on September 12, 2009, at City Hall. The intent of the scoping meeting was to provide interested individuals, groups, public agencies and others a forum to provide input in an effort to assist in further refining the intended scope and focus of the EIR. There were eight people in attendance at the scoping meeting, and the meeting sign in sheet is included in Appendix A. The focus of the scoping meeting was on traffic and parking. The following topics raised at the scoping meeting are addressed in the traffic section of the EIR.

- *Traffic impacts at the intersection of Main Street at Borchard Drive*
- *Impacts to parking supply during construction activities*
- *Long term impacts to parking supply as the Hospital District builds out*

The Historic Preservation Committee and the San Buenaventura Conservancy were involved in evaluation of Project Area structures proposed for demolition and were contacted regarding the scope of the project. Effects to Historic Resources are addressed in Section 4.3, *Historic Resources*.



1.1.2 Changes from Previous Draft EIR

A Draft EIR was circulated for public review from March 22, 2010 until May 19, 2010. The city received ten comment letters on the Draft EIR. Based on the comments received, City staff determined that the responses included potentially significant new information related to potential environmental impacts. Consequently, based on the requirements of CEQA Guidelines Section 15088.5, this Draft EIR is being recirculated to allow for additional public review of the new information. This revised and recirculated document, which supersedes in its entirety the Draft EIR circulated from March 22nd to May 19th. This recirculated Draft EIR includes new information and analysis that addresses relevant comments on the previously circulated Draft EIR. Although the comment letters submitted in response to the original Draft EIR will be part of the administrative record for the project, pursuant to CEQA Guidelines Section 15088.5(f)(1) the City will only be responding to comments submitted in response to this recirculated Draft EIR. Pursuant to CEQA Guidelines Section 15088.5(g), a summary of the revisions to the EIR follows.

Section 1.0 Introduction. This section was amended to expand on the tiering concept and to further explain how the EIR serves as a program and project level EIR. This section was also amended to provide a brief description of the project history and describe the major changes to the document prior to recirculation.

Section 2.0 Project Description. This section was amended to include an expanded description of project design features associated with the Green Guide for Healthcare, additional explanation of expanded square feet for the new hospital and a description of proposed emergency room services/capacity. This section also includes a description of the Memorandum of Understanding between the City and Community Memorial Health System. Lastly, the characterization of the hospital square footage was modified to reflect a gross square footage of about 356,000 square feet. This square footage replaces the previous characterization of the new hospital as 320,000 square feet and the bed increase as 10 licensed beds, rather than the 12 that were previously analyzed. These new numbers were used for the analysis throughout the EIR.

Section 3.0 Environmental Setting. The setting information was amended to include a description of the hospital's current operations and a description of the sensitive receptors in the vicinity of the project. This section was amended to acknowledge a list of planned and pending projects in the immediate vicinity, but maintains the General Plan buildout projections as the basis for cumulative analyses. This section was also amended with language specifically describing the Cancer Center as a concurrent and unrelated project.

Section 4.0 Impact Analysis. This section was be modified to include a discussion of the impacts that were determined to be less than significant pursuant to the analysis of the Initial Study.

Section 4.2 Air Quality. This section was modified to include a discussion of health risk assessment for diesel particulate emissions during Phase I construction and now includes updated modeling and discussion regarding construction truck traffic. Additional background information regarding the Air Quality mitigation fund (Ordinance 93-37) was also be added.



Section 4.4 Noise. New noise measurements were taken to supplement existing information regarding the existing site conditions along roadway segment modeled for traffic noise increases. Additionally, the noise analysis was modified to discuss construction truck trips.

Section 4.5 Traffic and Parking. Impacts and mitigation measures were clarified, while additional information regarding project impacts in the short term were added. Additional discussion was added to further define principal intersections, analysis methodology (ICU vs. HCM), mitigation fees and projects funded by mitigation fees.

Section 4.7 Water Supply and Water Supply Assessment. A new section was added, based on the development of a Water Supply Assessment pursuant to SB 610. The water supply assessment was added to the EIR as Appendix J.

Section 4.8 Land Use. A new section was added to assess land use impacts.

Section 4.9 Greenhouse Gases. The existing Global Climate Change analysis was separated and is now a stand-alone section. Additional clarification was added regarding thresholds, Green Guide for Health Care project design features and greenhouse gas reduction features.

1.2 PURPOSE AND LEGAL AUTHORITY

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and the *CEQA Guidelines*. In accordance with Section 15121 of the *CEQA Guidelines*, the purpose of this EIR is to serve as an informational document that:

...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR is tiered from the 2005 General Plan Final EIR (FEIR) (State Clearinghouse No. 2004101014), which is hereby incorporated by reference and may be reviewed along with this Recirculated DEIR at the City's Community Development Department. The General Plan EIR is available on line at <http://www.cityofventura.net/cd/planning>, while this Recirculated DEIR is available on line at <http://www.cityofventura.net/cd/planning/devreview>. Summaries of the relevant discussions in the General Plan and its EIR have been included for each impact section that tiers off of the General Plan EIR. Where applicable, mitigation measures identified in the 2005 General Plan update EIR are incorporated into this Recirculated DEIR (see Table ES-2 in the Executive Summary).

Additionally, this EIR has been prepared as a Program EIR for buildout of phases I and II of the Hospital District Development Code pursuant to Section 15168 of the *CEQA Guidelines*, which states that a Program EIR may be prepared on a series of actions that may be characterized as one large project. The use of a Program EIR can allow a Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts.



This EIR also serves as a Project EIR for Phase I of the project, which involves the new hospital building and associated streetscape improvements. A Project EIR examines the environmental effects of a specific development project. This is the appropriate level of review for Phase I of the project, which is a specific development for which the project proponent is currently seeking entitlements.

As discussed further in Section 2.0, *Project Description*, Phase II involves buildout of the remainder of the proposed Hospital District). Because no specific development proposal is envisioned as part of Phase II, that portion of the project and full project buildout are conceptual in nature and are analyzed programmatically, as noted above.

Given the proximity of the hospital and the substantial existing medical-related uses, it is most likely that Phase II will be comprised primarily of medical office use. Pursuant to CEQA's reasonably foreseeable standard, the EIR analyzes that type of use in connection with Phase II.

The medical office uses also happen to usually be the most environmentally intensive use of those permitted by the Hospital District Development Code. For example, trip generation rates and parking requirements associated with medical office use are higher than those associated with other permitted uses such as residential development. Consequently, the EIR analyzes the reasonably foreseeable uses associated with Phase II while also presenting a realistic and even conservative analysis of Phase II's impacts.

In certain circumstances uses other than medical office were analyzed in the DEIR. For example, the noise analysis (Section 4.4) considers impacts to residential uses in Phase II (which are permitted under the Hospital District Development Code but are not expected to occur).

1.3 SCOPE AND CONTENT/ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This EIR addresses the issues for which the City of Ventura determined that significant environmental impacts could occur based on the Initial Study, responses to the NOP, and comments received on the original Draft EIR. The issues addressed in this EIR include:

- *Aesthetics*
- *Air Quality*
- *Cultural /Historical Resources*
- *Hydrology and Water Quality*
- *Water Supply*
- *Land Use and Planning*
- *Noise*
- *Traffic/Parking*
- *Greenhouse Gas Emissions*
- *Other CEQA sections*

The Initial Study found that there would be no impacts or less than significant impacts in the following areas:

- *Agricultural Resources*
- *Biological Resources*
- *Geology/Soils*
- *Hazards/Hazardous Materials*
- *Land Use and Planning*
- *Utilities and Service Systems*
- *Mineral Resources*
- *Population and Housing*
- *Public Services and Recreation*



This recirculated EIR contains additional discussion on Land Use and Planning as well as Water Supply. These two analyses were added to supplement the analysis contained in the Initial Study and supersede the discussions in the Initial Study. This EIR identifies potentially significant environmental impacts, including site-specific and cumulative effects of the project, in accordance with the provisions set forth in the *CEQA Guidelines*. In addition, the EIR recommends feasible mitigation measures, where possible, that would reduce or eliminate adverse environmental effects.

In preparing the EIR, pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and background documents prepared by the City were utilized. A full reference list is contained in Section 7.0, *References and Report Preparers*.

The Alternatives Section of the EIR (Section 6.0) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines*. The alternatives discussion evaluates the CEQA-required “no project” alternative and two alternative development scenarios for the Project Area.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. The *CEQA Guidelines* provide the standard of adequacy on which this document is based. Section 15151 of the *CEQA Guidelines* states:

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.

1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Ventura is the lead agency for the project because it holds principal responsibility for approving the project.

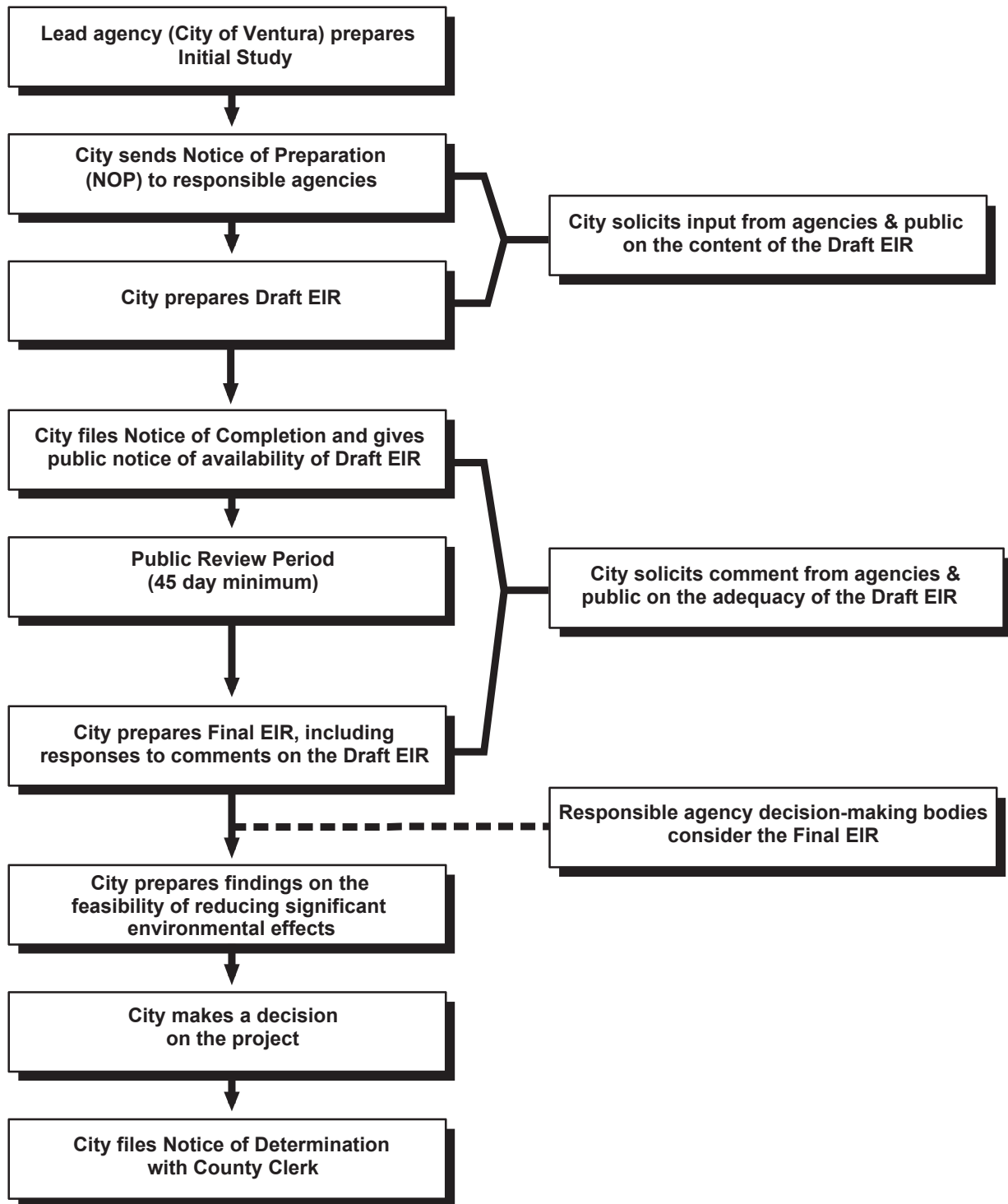
A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. There are no responsible agencies for the proposed Code as the City of Ventura has sole discretionary authority to approve the Project. A “Trustee Agency” refers to a state agency having jurisdiction by law over natural resources affected by a project but without the legal authority to approve or carry out the project [Guidelines §15386]. The project is located within a completely urbanized portion of the midtown area within the City of Ventura. There are no natural resources onsite and there are no trustee agencies for this project.

1.5 ENVIRONMENTAL REVIEW PROCESS

The major steps in the environmental review process, as required under CEQA, are outlined below. The steps are presented in sequential order. Figure 1-1 illustrates the review process.

1. **Notice of Preparation (NOP).** After deciding that an EIR is required, the lead agency must file an NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the proposed project could create significant environmental impacts.
2. **Draft Environmental Impact Report (DEIR).** The DEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and, h) discussion of irreversible changes[§15126(c)].
3. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the Notice in the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the Notice to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of DEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a DEIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the Clearinghouse (Public Resources Code Section 21091) approves a shorter period.
4. **Final EIR.** A Final EIR (FEIR) must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; d) responses to comments; and e) a mitigation monitoring and reporting program.
5. **Certification of FEIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the lead agency; and, c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project (*CEQA Guidelines* Section 15090).





CEQA Environmental Review Process

Figure 1-1
City of Ventura



6. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or, c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or, c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA legal challenges [Public Resources Code Section 21167(c)].



2.0 PROJECT DESCRIPTION

The proposed Project involves the adoption of the Community Memorial Hospital District Development Code, hereinafter referred to as the CMH Code, amendment of the existing Midtown Corridors Development Code, as well as construction of a new 355,667 square foot, six-story hospital building. For the purposes of analysis, the project will be characterized as 356,000 square feet. Other improvements within the Hospital District include abandonment of portions of Cabrillo Drive and Glen Street and extension of Borchard Drive north to Loma Vista Road, as well as creation of a new street connection to the Hospital from Main Street.

This section of the EIR describes the characteristics of the Hospital District, objectives, buildout potential of the CMH Code, and the approvals needed to implement the CMH Code. In addition, this EIR at times also refers to the Master Plan, which characterizes the vision, goals and policies that are implemented through the CMH Code. The Master Plan describes how 2005 General Plan policies and actions are applied to the Project Area and is available on file at the City Planning Counter for review. The Project Description and subsequent analysis focuses primarily on the Development Code. The Development Code is contained in Appendix G.

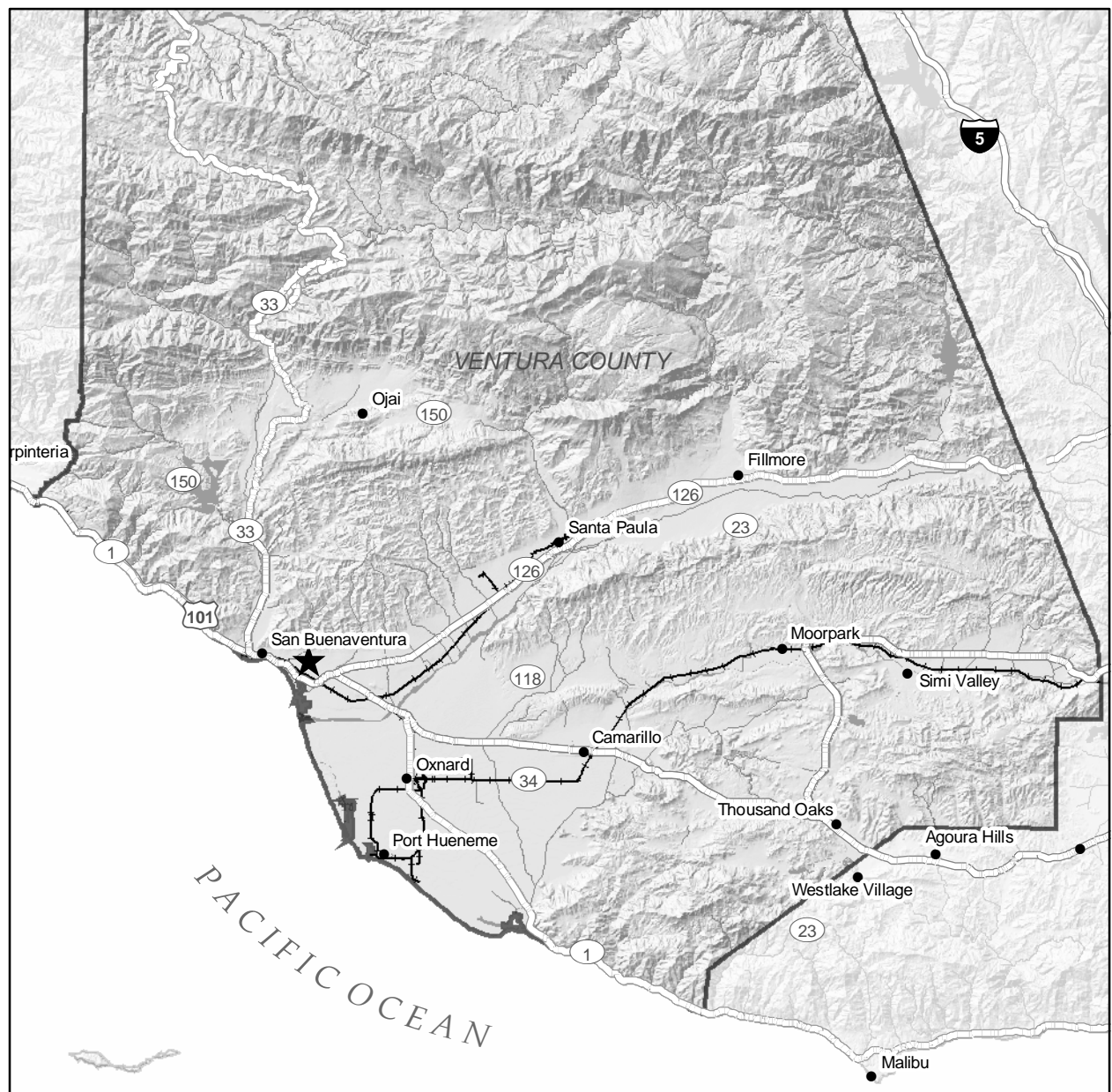
2.1 PROJECT PROPONENT

Community Memorial Health System
147 North Brent Street
Ventura, CA 93003

2.2 GEOGRAPHIC EXTENT OF THE PROJECT AREA

The Project Area is located in the City of Ventura, California (City) as shown in Figure 2-1. The Project Area encompasses about 14 acres and is roughly triangular in shape. It is located in the Midtown area of the City and is bounded by Loma Vista Road to the north and Brent Street to the east. The western boundary of the Project Area corresponds to Main Street. However, a portion of the Project Area (Main Street fronting parcels and Midtown Corridor corner parcels) will not be subject to the CMH Code. Figure 2-2(a-c) show the project boundaries relative to different actions triggered under the project. The project will trigger three types of modifications to the City's zoning code. These zoning modifications are differentiated below and the respective geographic extent is shown on Figures 2-2(a-c).

- *Add Shopfront Frontage Type to a portion of the Midtown Corridors Code as shown on Figure 2-2(b). A portion of the property that is currently within the Midtown Corridors Code will be amended to specify the Shopfront Frontage Type along the boundaries that face open space or street frontage. Figure 2-2(b) shows the geographic extent of this zoning modification.*



Basemap Source: ESRI Data, 2004, and USGS/CDFG, 2002.



Regional Location

Figure 2-1
City of Ventura





Basemap Source: CIRGIS, 2009.



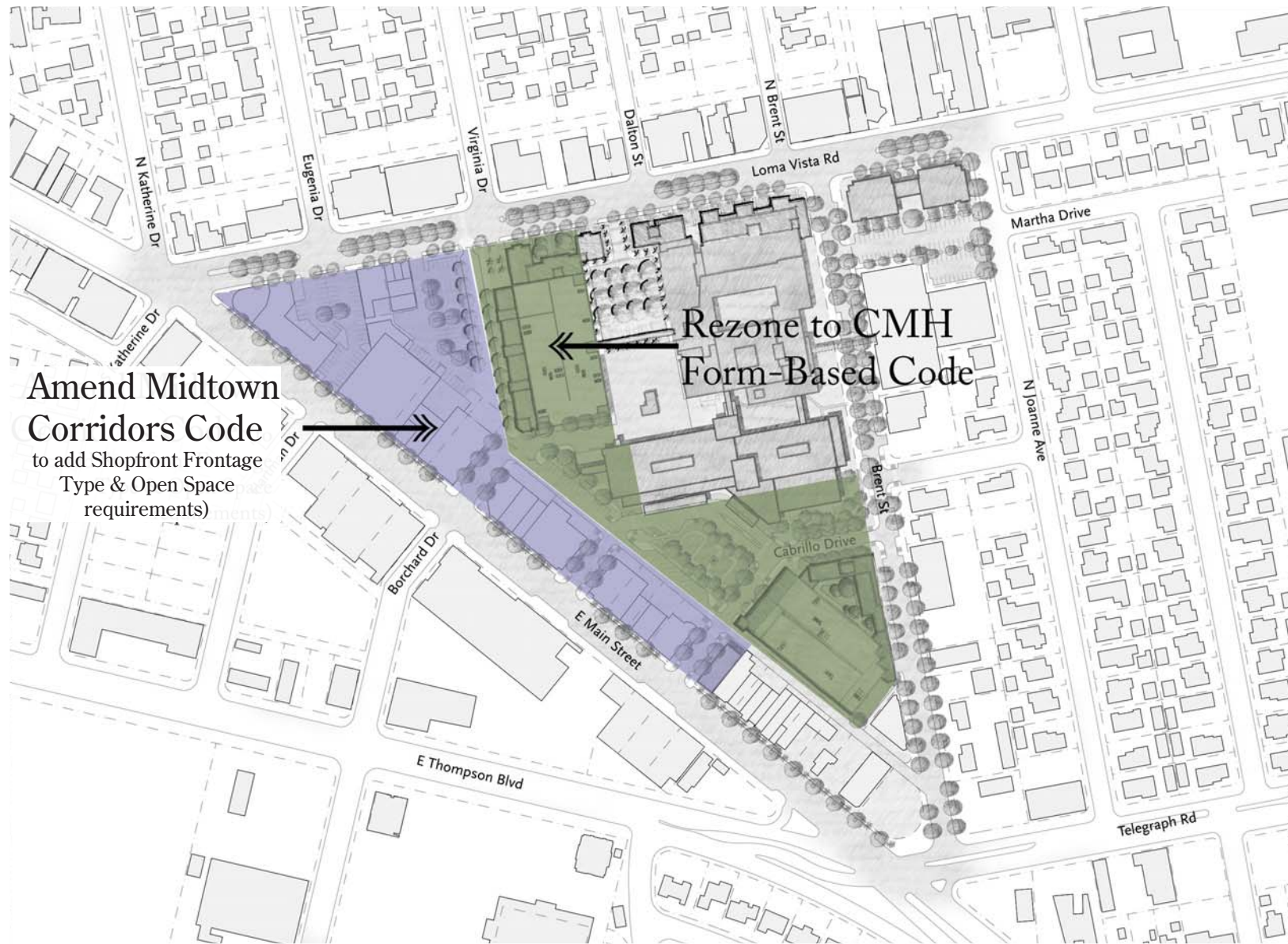
Project Boundary
Total Parcels Affected by
the Zoning Amendments



0 100 200 400 Feet

Project Area Location

Figure 2-2a
City of Ventura



0 100 200 400 Feet
(Approximate Scale)

Zoning Modification Boundary

Source: City of Ventura, January 2010.

Figure 2-2b
City of Ventura



0 100 200 400 Feet
(Approximate Scale)

Parcels Included in the CMH Form-Based Code

Source: City of Ventura, January 2010.

Figure 2-2c
City of Ventura

- *Remove from Midtown Corridors Code and Add to CMH Code.* Select properties that do not front Main Street or form Midtown Corridor Code corner frontage will be removed from the Midtown Corridors Code and added to the area that will be subject to the CMH Code, through adjustment of the Midtown Corridor Code Boundary. This area will form the campus that lies south and west of the hospital. Figure 2-2(b) shows the geographic extent of this property.
- *Rezone to Establish the CMH District and Boundary.* The property that is removed from the Midtown Corridors Code will be rezoned to Hospital District (SD:H1). The exiting Hospital Zone and Professional Office Zone will also be rezoned to create SD:H1. Figure 2-2(c) shows the geographic extent of this area, which is roughly bounded by the alley to the west, Loma Vista Road to the north and North Brent Street to the east.

The Project Area is regionally accessible by State Route (SR) 126 and U.S. Highway 101. Figure 2-1 illustrates the Project Area in its regional context. Figure 2-2 (a-c) illustrates how different portions of the Project Area will be affected by the Project.

2.3 CURRENT LAND USE AND REGULATORY SETTING

2.3.1 Current Land Uses

The proposed Hospital District is currently occupied by an eight-story, 225,299 square foot (sf) hospital building, smaller hospital-owned properties on the south side of the main hospital building along Cabrillo Drive, commercial and residential buildings along Brent Street, and parking facilities. The Hospital District vicinity includes residential neighborhoods to the north and east, while commercial retail and medical office uses are situated along Main Street, Loma Vista Road, North Brent Street and Thompson Boulevard. Parcels within the Project Area comprise about 14 acres of land (see Table B-1 Parcel Details in Appendix B). Parcels within the Hospital District comprise about 10 acres. Figure 2-3 illustrates existing conditions within the Project Area.

2.3.2 Land Use Regulatory Overview

The Project Area is within the City of Ventura and is therefore under the City's regulatory authority. Development within the City is guided by policies and programs of the 2005 General Plan, which are further implemented by the zoning code. Following is a description of the applicability of relevant planning documents. Table 2-1 summarizes the existing characteristics of the Project Area.

2005 General Plan

The Ventura General Plan was adopted in 2005. The 2005 General Plan establishes the land use designations, policies, programs, standards, and goals for development of the City and its



Photo 1 - Community Memorial Hospital.



Photo 2 - Medical Office Building.



Photo 3 - Residential unit.



Photo 4 - Office building with hospital building behind.

Existing Visual Character of Project Area

Figure 2-3
City of Ventura



sphere of influence through 2025. The 2005 General Plan is a formal expression of community goals and desires.

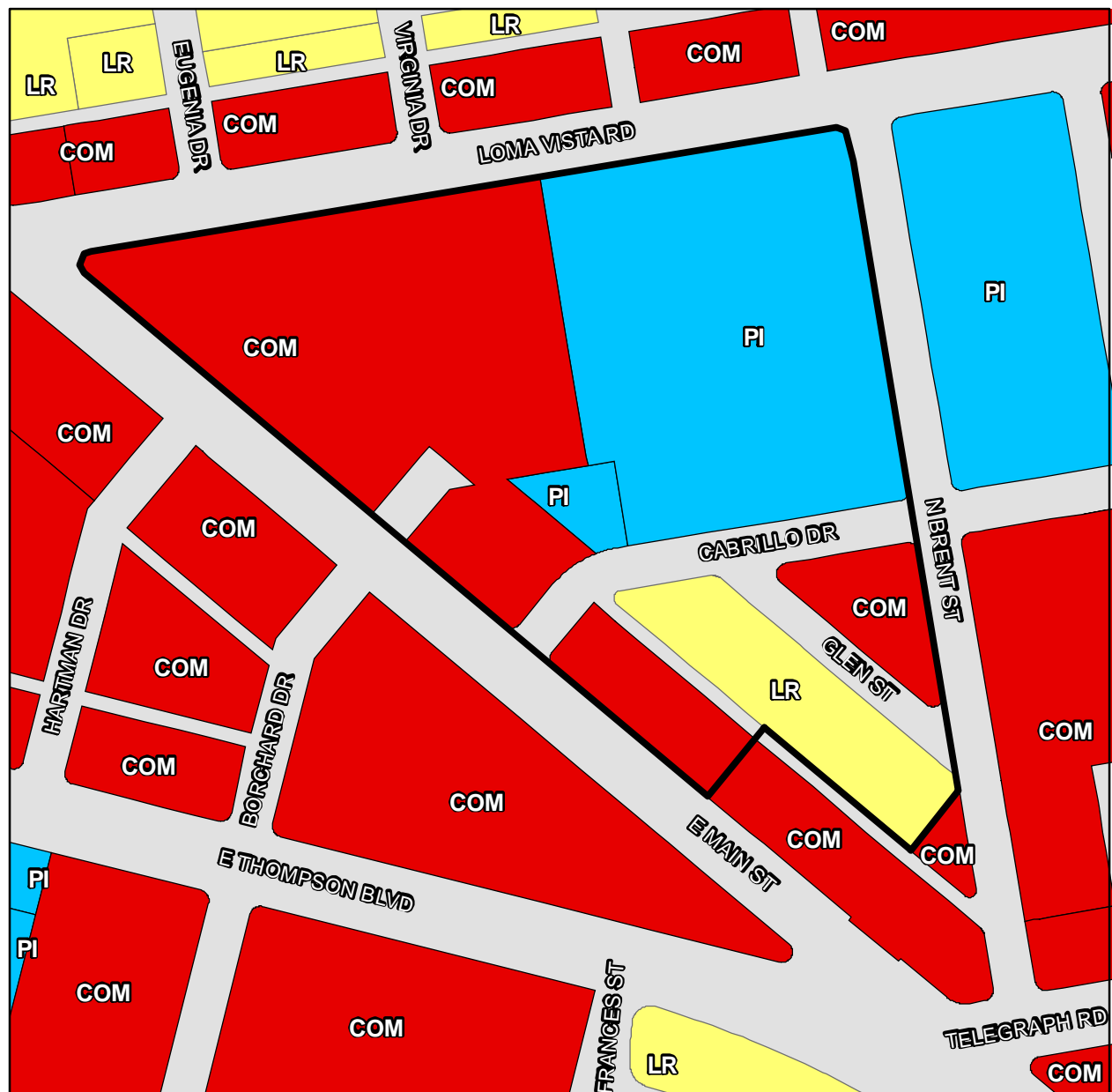
**Table 2-1
Existing Project Area Characteristics**

2005 General Plan Land Use Designations	Public and Institutional; Commerce
Zoning Designation	(T5.2) Urban Neighborhood Center (H) Hospital and (P-O) Professional Office Zone
Midtown Corridor Regulating Plan Designations	T5.2 Urban Center Zone, with the following overlays: Hospital overlay and Residential Two (2) overlay for the property fronting Loma Vista Road, while a shopfront frontage overlay lies along Main Street and Loma Vista Roads.
Current Use and Development	Hospital facility, support medical facilities and general commercial uses
Regional Access Local Access	State Route 126 and U.S. Highway 101 Loma Vista Road, Main Street, Thompson Boulevard, Brent Street, Cabrillo Drive
Public Services	Water: City of Ventura Sewer: City of Ventura Fire: Ventura Fire Department Police: Ventura Police Department

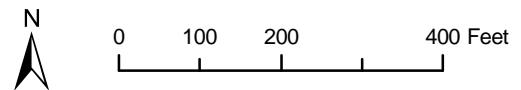
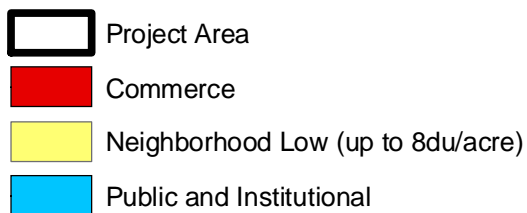
The 2005 General Plan describes a number of subareas within the City. The Project Area is within the Loma Vista Road Corridor as identified by the 2005 General Plan. The Loma Vista Road Corridor is described as the ideal place to focus on creating a concentration of medical and research-centered business and the CMH Code implements this vision of the 2005 General Plan. The Project Area is also partially contained within the Main Street Corridor and the Telegraph Road Corridor. The west and southeast portions of the Project Area are designated as ‘Commerce’ on the 2005 General Plan Land Use Map, while the northeast corner of the Project Area is designated as ‘Public and Institutional’ on the General Plan Land Use Map (see Figure 2-4). The southern portion of the Project Area, which is currently developed with a rectangular surface lot, is designated for residential development as Neighborhood Low (0-8du/acre). Each of these General Plan land use designations is shown on Figure 2-4, while Figure 2-5 shows the existing zoning for the entire Project Area. Development within this area is guided by General Plan policies, the zoning ordinance, and citywide design guidelines.

Midtown Corridors Development Code

The Midtown Corridors Development Code is a form-based code that is applicable to the Main Street and Thompson Boulevard corridors. The Midtown Corridors Development Code

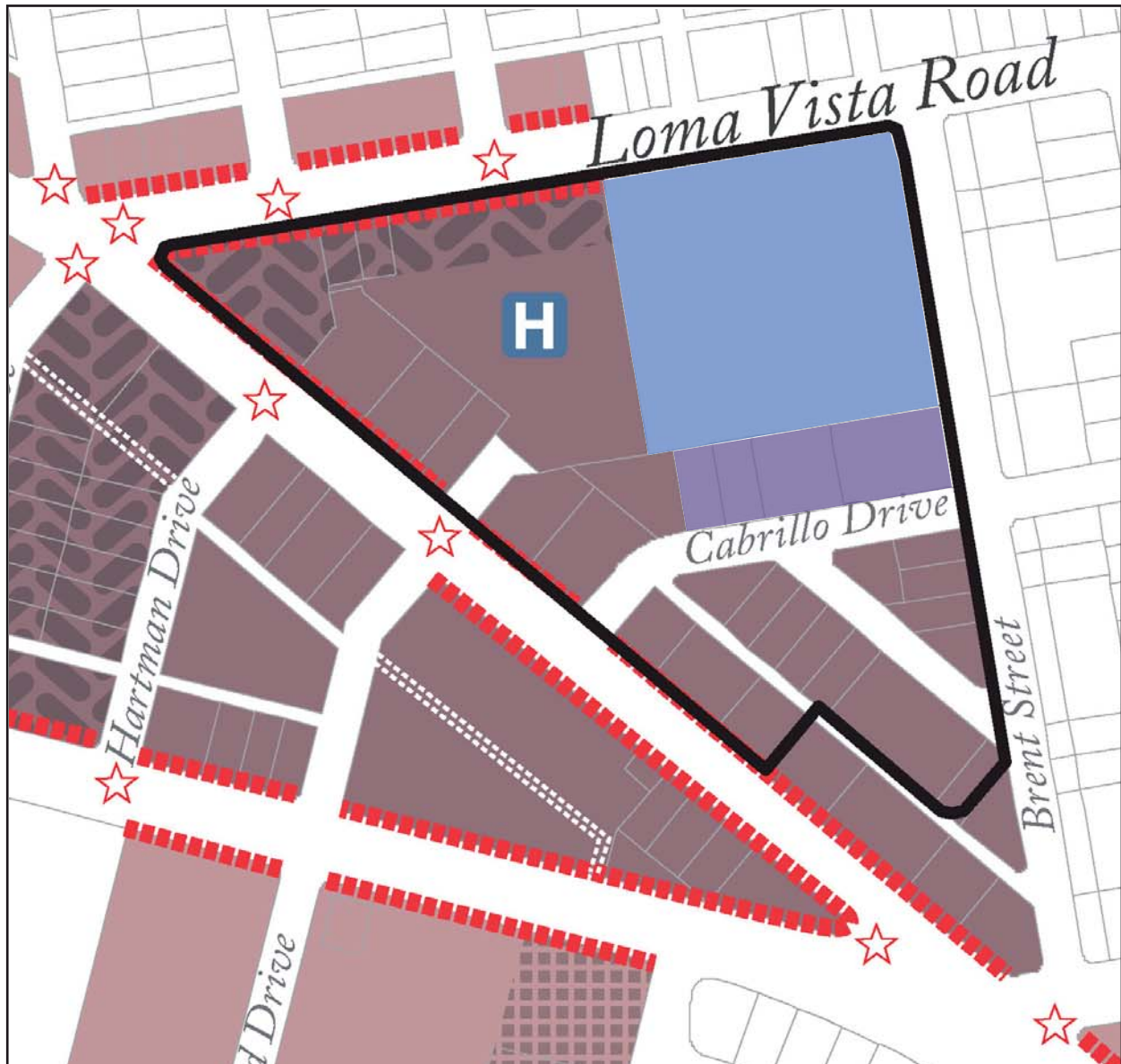


Basemap Source: City of San Buenaventura, 2004.

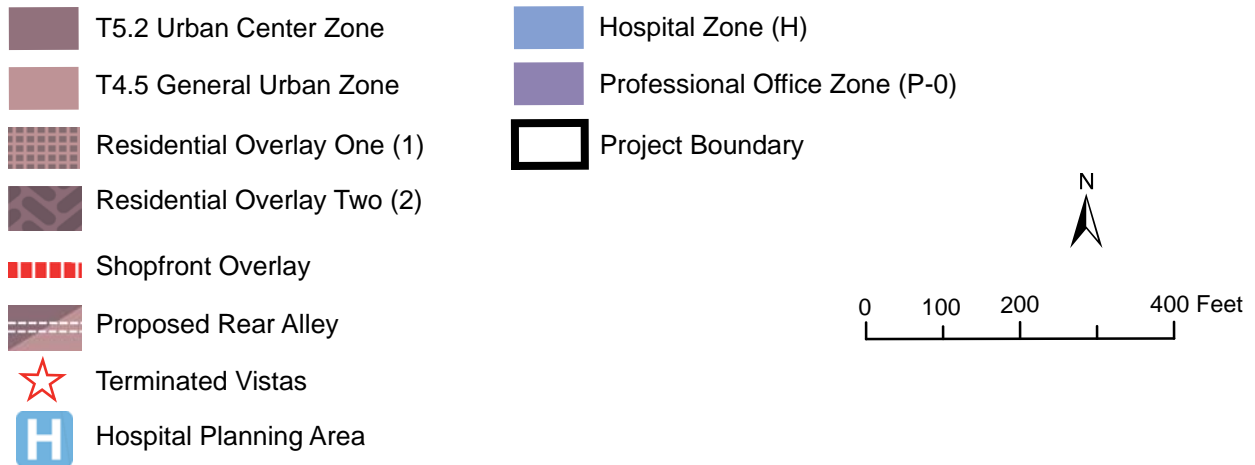


Existing 2005 General Plan
Land Use Designations

Figure 2-4
City of Ventura



Basemap Source: Adapted from Regulating Plan, Figure 1-1 Midtown Corridors Development Code, Adopted by the City Council December 17, 2007.



Existing Zoning

Figure 2-5
City of Ventura

regulates form and land uses in the vicinity of the Main Street and Thompson Boulevard corridors, including about half of the Project Area (see Figure 2-5). As shown on Figure 2-5, the Midtown Corridors Development Code currently regulates zoning of all land uses within the Project Area, except the property that contains CMH and the property between the hospital and Cabrillo Drive. Properties along the Main Street corridor will remain subject to the Midtown Corridors Development Code (see Figure 2-6). Several changes to the Midtown Corridors Code would be triggered under the Project as proposed to integrate the areas governed by each code. A City-owned open space area is planned for a triangular area west of the future Borchard Drive extension and opposite the existing Parking Garage. The OS zone is not currently part of the Midtown Code. Additionally, properties that are currently located within the boundary of the Midtown Code would be removed and added to the CMH Code [see Figure 2-2(b)], this boundary relocation would be an amendment to the Midtown Code. Other minor amendments to the Midtown Code include adding a shopfront overlay frontage type to interior street and open space frontages (see Figure 2-6); and removing the terminated vistas designation from Borchard Street.

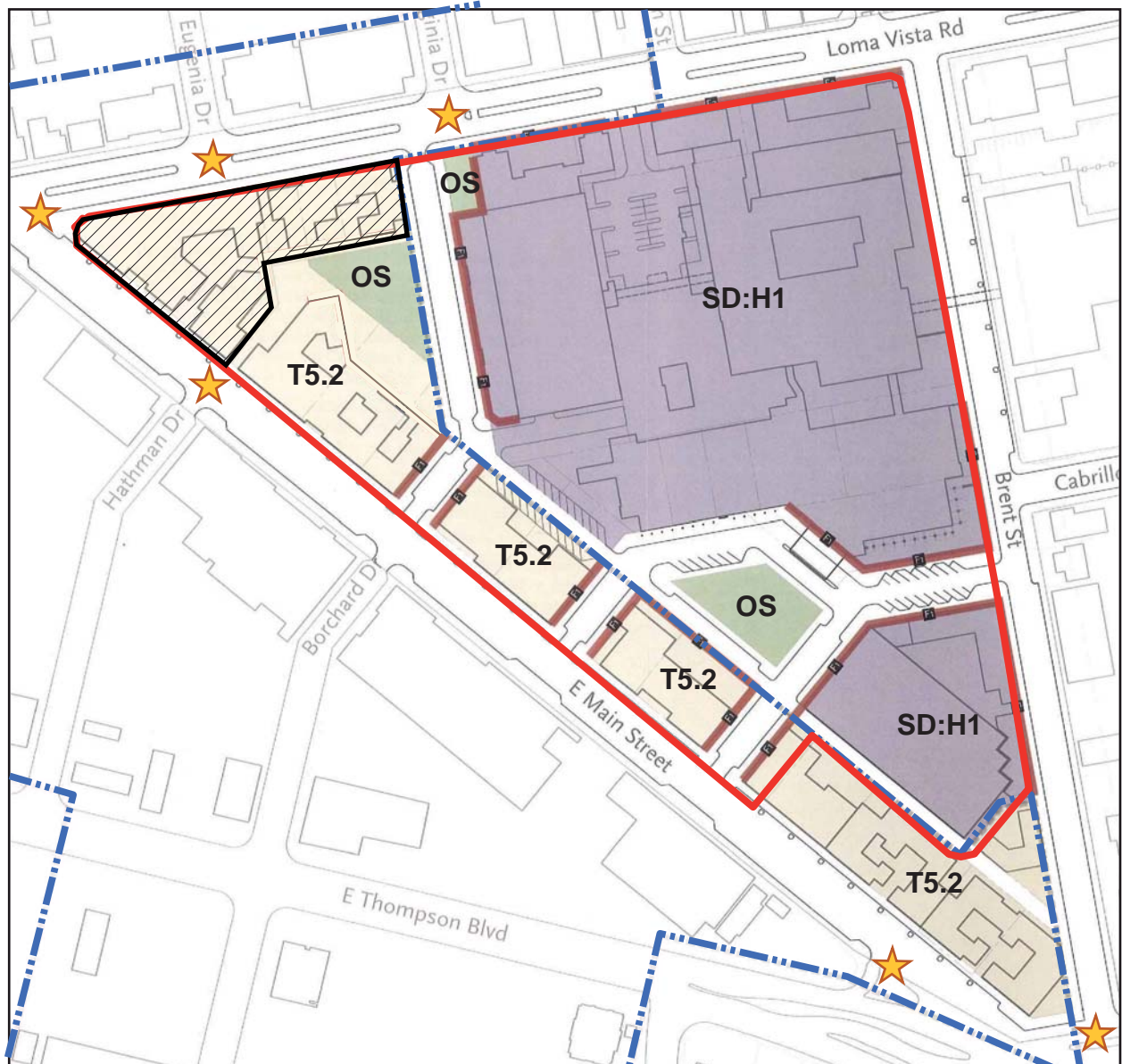
Proposed Community Memorial Hospital District Development Code

The Community Memorial Hospital District Development Code (CMH Code) is a form-based code that was developed to be consistent with the Midtown Corridors Development Code. In particular, the CMH Code aims for human-scale development that is pedestrian oriented, incorporates a mix of land uses, and has effective circulation elements. The proposed CMH Code will define the Hospital District (SD:H1), which will amend the zoning ordinance. The new SD:H1 district will be subject to the CMH Code, which will supersede the existing zoning requirements for that area. The CMH Code includes open space elements, and consequently, includes an Open Space Zone (OS) designation. Two open space areas are planned as part of the Hospital District, including the Hospital Plaza, which is located opposite the entry to the hospital, as well as a plaza at the southeast corner of the future intersection of the Borchard Drive extension at Loma Vista Road. Also envisioned under the CMH Code is the realignment of Cabrillo Drive west of North Brent Street. Under the CMH Code, Cabrillo Drive would be moved approximately 50 feet to the south at N. Brent Street, continuing westward for about 200 feet and then branching to two streets. The north branch would connect with the existing Cabrillo Drive alignment and outlet on Main Street as occurs currently, while the southern branch would outlet on Main Street to create a new pedestrian and vehicular linkage to the hospital district and new open space area.









2.4 CODE PURPOSE

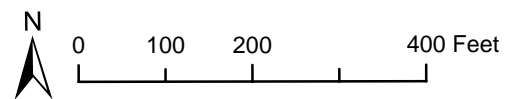
The CMH Code is intended to guide future improvements to the existing hospital and Project Area. The overall purpose of the CMH Code is to:

- *Ensure that development is of human scale, primarily pedestrian-oriented, and designed to create attractive streetscapes and pedestrian spaces;*
- *Moderate vehicular traffic by providing for a mixture of land uses, pedestrian-oriented development, compact community form, safe and effective traffic circulation, and appropriate parking facilities;*



Basemap Source: Moule & Polyzoides Architects and Urbanists/Rasmussen and Associates, February 19, 2009.

-  Project Area Boundary
-  Proposed New Midtown Corridor Code Boundary
-  Hospital District Zone (SD:H1)
-  T5.2 Urban Center Zone
-  Open Space Zone (OS)
-  Frontage Overlay
-  Residential Overlay Two (2)
-  Terminated Vistas Project



Proposed Zoning

Figure 2-6
City of Ventura



- *Provide standards for the continuing orderly growth and development of the City that will assist in protecting and enhancing the community identity of Ventura;*
- *Conserve and protect the City's natural beauty and setting, including scenic vistas, cultural and historic resources, hills and trees;*
- *Ensure that proposed development and new land uses conserve energy and natural resources; and*
- *Provide for compatibility between different types of development and land uses through effective urban and architectural design.*

2.5 PHYSICAL CHARACTERISTICS OF PLANNED DEVELOPMENT

The CMH Code will create a concentration of medical and office buildings that incorporate, or are adjacent to, retail and housing uses. Key principles incorporated into the CMH Code to achieve an integrated urbanism community include pedestrian orientation, a mix of land uses, infill development, interconnected street systems, public realm qualities, distinct character, smart transportation and parking, and ease of use. A conceptual drawing of Phase I development under the CMH Code is shown on Figure 2-7. A conceptual drawing of Phase II development is shown on Figure 2-8, while a conceptual rendering of the massing standards allowed under the CMH Code is illustrated on Figure 2-9.

2.5.1 Development along Perimeter Roadways.

Loma Vista Road. It is estimated that the CMH Code would allow for about 87,150 square feet (sf) of new office use along Loma Vista (see Table 2-3). This new development along Loma Vista Road also includes an open space pocket park at the southeastern corner of the intersection formed by the new Borchard Drive extension at Loma Vista Road, as well as a landscaped parking court, with access from Loma Vista. Buildings along Loma Vista Road would have a maximum height of 55 feet. Medical office buildings are anticipated to eventually replace existing surface parking lots along Loma Vista Road. The building immediately east of the proposed Borchard Drive extension would serve as a “liner” building, which would serve to block views of the existing parking structure. This liner building would involve development of about 34,800 sf of office uses (see Table 2-3). The proposed Borchard Drive extension liner building would have a maximum height of 55 feet.

Brent Street. The 225,299 sf existing hospital facility would continue to be used by the hospital for non-essential services, including storage and warehouse functions, business offices, purchasing, medical records, information technology support, student nurse teaching laboratories, volunteer support, laundry, and a variety of out-patient services. These non-essential hospital support services are anticipated to occupy 121,000 sf of the existing hospital building (see Table 2-3). However, there is a surplus of about 104,000 sf that is proposed for adaptive reuse. The uses that have been identified as compatible include additional out-patient service use, cancer awareness and community education, consolidation of administrative and business functions that are currently located off-site, physician offices, skilled nursing, temporary housing for patient families or hard to recruit re-locating employees, and wet lab/incubator space for biotechnology businesses or educational programs.



Drawing source: Moule & Polyzoides, Architects,
Rasmussen & Assoc. January, 2010.

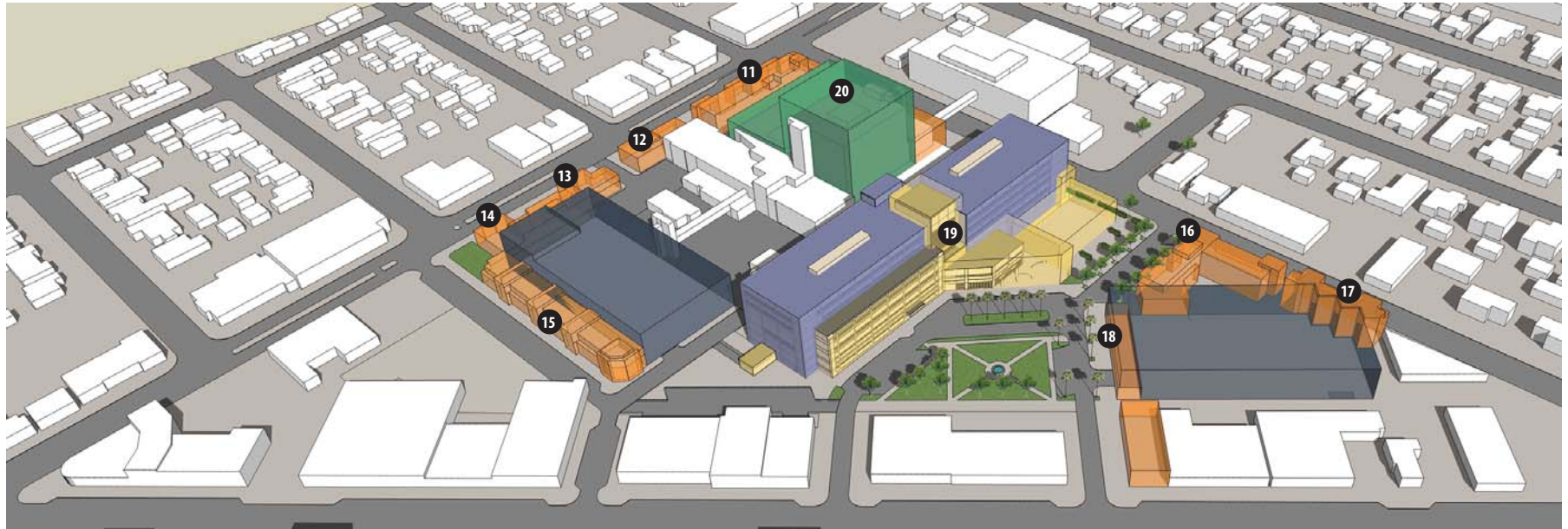
Figure 2-7
City of Ventura



Drawing source: Moule & Polyzoides, Architects,
Rasmussen & Assoc. January, 2010.

Illustrative Phase II Development

Figure 2-8
City of Ventura



Massing Diagram

Basemap Source: CMH Development Team, January 2010.

Figure 2-9
City of Ventura



Further to the south along Brent Street, liner buildings are planned along the eastern edge of the proposed new garage, south of Cabrillo Street. It is estimated that these buildings would accommodate about 41,000 square feet of medical office use. This area is currently occupied by single family residences that would be demolished to construct the new parking garage and liner buildings. The parking garage is anticipated to be a maximum height of 55 feet tall and would provide 570 parking spaces.

2.5.2 The New Hospital Building and Its Services

The existing Community Memorial Hospital provides a full-range of medical care services. The hospital currently has 53 single rooms, 79 double rooms, four triple rooms, one four-bed neonatal nursery, a six-bed neonatal nursery, a ten-bed intensive care unit with an open plan, and an eleven-bed coronary care unit. There are a total of 53 single beds/rooms and 189 shared room beds in the existing hospital. There is also an emergency room with 24 treatment spaces.

The new hospital facility would be a 356,000 sf, six-story building with one basement level. The new building would be located south of the existing hospital facility on Brent Street (see figures 2-7 and 2-8). The new hospital building would have a footprint of about 54,000 sf. Capacity of the hospital facilities is anticipated to incrementally increase from 242 to 252 licensed hospital beds. The new hospital building is being designed to provide 234 single-bed rooms, three neonatal nursery units with six beds in each unit, and a combined intensive care and coronary car unit (the combined bed total, currently 21 at the existing hospital, is expected to be between 24 and 30 at the new hospital). This increase is designed to increase operational efficiency and patient satisfaction. Similarly, treatment spaces in the Emergency Room will increase from 24 to 40 to increase operational efficiency, decrease waiting room time and increase patient satisfaction. A more complete description of the functionality of the proposed Emergency Room is contained in Appendix B along with further detail on the combined intensive and coronary care units. Based on the existing hospital employees/beds ratio of 1,450 employees/242 beds, it is estimated that about 60 new employees would be generated by a 10 bed increase. This conservative measure (due to the hospital's current lower employee ratio) is also expected to encompass possible minor staffing increases in the intensive and coronary care units and the Emergency Room. Essential services, as defined by California code, would be relocated to the new portion of the hospital building. Non-essential services are expected to remain in the existing building, and would utilize 121,000 sf, or approximately 54% of the current facility.

The purpose of increasing overall building area within the new hospital is to meet current industry standards with respect to space requirements, including changing code requirements, providing larger private patient rooms, and adequately accommodating outpatient services. The new hospital would be about 356,000 sf, plus the 121,000 sf of non-essential services in the old building for a total of 477,000 square feet. This is about 1,893 square feet per bed. The median square feet per bed for 71 replacement community hospitals across the United States as reported by Stroudwater Associates (2009) ranged from 2,286 square feet to 2,989 square feet (sum of baseline square feet and square feet/bed increase). Thus, this hospital replacement project with 1,893 square feet per bed is within the study range and below the median values.

As noted, above, the hospital's existing emergency room contains approximately 24 treatment spaces. ER patients currently must share treatment spaces with others while they are moved to other hospital service areas (e.g., radiology and imaging) for treatment, and current ER patients occasionally must wait to receive another ER treatment space. In order to ensure that ER patients have their own treatment space for the duration of their stay, the new hospital would have 40 treatment spaces. Of these 40, five would be committed to new "fast-track" subdivision of the ER that would be utilized to treat less acute needs quickly. These measures are expected to decrease waiting room time and increase patient satisfaction. Because emergency room visits are unpredictable and are generally accommodated at the hospital now regardless of capacity, these measures are not expected to significantly increase the demand for hospital services. Rather, they are being implemented to better serve existing ER service demands. Accordingly, staffing is not expected to significantly increase for ER services. Similarly, the combined intensive and coronary care unit will permit hospital staff to more efficiently operate both care units. Like the ER, patient demand for these care units is unpredictable, and the combined unit is not expected to increase the demand for intensive or coronary care services but rather is expected to better serve existing demands and increase patient satisfaction.

In addition to the primary hospital buildings, the new hospital would have three cooling towers located on its rooftop. The towers would be 500 tons each and would be 24' by 12' by 11'. There would also be two emergency generators at 1,500 kW each. Lastly, under current conditions there are about 12 helicopter landings at the hospital helipad (located on the roof of the existing parking garage) per year with no anticipated increase under the proposed project.

The proposed new hospital is registered with the Green Guide for Healthcare Program. The Green Guide for Health Care,TM is the healthcare sector's first quantifiable sustainable design toolkit integrating enhanced environmental and health principles and practices into the planning, design, construction, operations and maintenance of healthcare facilities. The Green Guide is not a LEED® rating system and is not a product of the U.S. Green Building Council. However, the Green Guide has a history of collaboration with the U.S. Green Building Council, beginning with an agreement in 2002 to borrow the organizational structure from the USGBC's LEED Green Building Rating System. The Green Guide for Healthcare adopted the LEED structure because it is a familiar and effective method used by a rapidly growing segment of the building design, construction, operations and maintenance industries. For many credits, the Green Guide directly incorporates the language of a parallel LEED credit, referencing credits in the LEED systems for New Construction, Existing Buildings – Operations and Maintenance and Commercial Interiors. In some cases, existing LEED credits have been modified to respond to the unique needs and concerns of healthcare facilities. In others, new credits have been added beyond those in current LEED products.

At this preliminary stage in the design process, the project has been registered and numerous credits have been identified for pursuit. It is anticipated the project would achieve between 24 -40 total points. A list of some of these credits are as follows.

- SSP1 *Erosion control plan*
- SS1 *Avoid virgin land*
- SS2 *Density of > 30ksf/acre*
- SS4.1 *Locate building within ¼ mile of two bus lines*



- SS4.2 *Incorporate bike racks and showers*
- SS4.3 *5% preferred parking for fuel efficient vehicles*
- SS4.4 *5% preferred parking for carpools*
- SS5.3 *50% of parking in a structure*
- SS6.1 *decrease runoff by 25%*
- SS6.2 *Treat 90% of runoff*
- SS9.1 *Provide outdoor place of respite*
- WEP1 *Non-potable water for equipment cooling*
- WE2.1 *Water use measurement (separate meters for different uses)*
- WE2.2 *Motion sensor valves in patient sinks and public toilets*
- WE2.5 *Condensate reuse*
- EAP1 *Basic commissioning*
- EAP2 *Min. energy performance*
- EAP3 *No CFC based refrigerants in HVAC*
- EA1.0 *Optimize energy performance*
- EA5 *Electricity use measurement (separate metering for distinct uses)*
- EA6.0 *Green power purchase contract*
- EA7 *Equipment efficiency (75% of equipment equal to "energy star")*
- MRP1 *Designated recycling collection areas*
- MRP2 *Mercury elimination I (mercury reduction plan, no mercury in equipment, No HID mercury vapor lamps, Energy Star exit signs)*
- MR2.1 *Recycle 50% of construction waste*
- MR4.2 *Mercury Elimination II (low mercury fluorescent lamps)*
- MR4.3 *Lead and cadmium free paints*
- MR5.1 *Furniture reuse/recycle*
- EQP1 *Minimum AIQ performance*

2.5.3 Open Space

Open space within the Hospital District would include two public open space areas (see Figure 2-7). A Hospital Plaza is planned in front of the new hospital building on Cabrillo Drive, while a pocket of open space would be located at the southeast corner of the intersection of the new Borchard Drive extension with Loma Vista Road. A third open space area is planned for a triangular area southwest of the intersection of the proposed Borchard Drive extension at Loma Vista Road, opposite the existing parking garage. However, this plaza would be constructed within the zone regulated by the Midtown Corridor Development Code.

A private hospital affiliated healing garden is also planned for the northern side of the new hospital building. Other public realm improvements include a Street Tree Program, which would determine the species of trees for each street in the Hospital District. Street trees include red-flowering gum trees, gold medallion trees, Mexican fan palms, Chinese flame trees, rainbow eucalyptus, and New Zealand Christmas trees.

2.5.4 Parking

Parking was identified as one of the major issues to be evaluated for hospital operations and buildout under the CMH Code. The following parking requirements will be applied to the Hospital District.

- *One parking space per 1,500 square feet of residential land uses in the Hospital District*
- *Two spaces per bed for the hospital*
- *One space per 300 square feet of gross floor area for all other non-residential uses*

Physical elements related to parking and transportation, as proposed in the Master Plan and Development Code include the following.

- *Streetscape improvements such as corner bulbouts to better define on-street parking and pedestrian circulation along Loma Vista Road*
- *Realignment of Cabrillo Drive and extension of Borchard Drive south of Loma Vista Road*
- *Streetscape improvements along Brent Street and Cabrillo Drive*
- *Provision of a landscaped parking court accessed from Loma Vista Road*
- *Addition of 94 public spaces in the existing parking structure by moving the public/private separation gate upwards*
- *Construction of a new 570 space parking structure in the southern portion of the Project Area (see Figure 2-7 and 2-8)*

A central parking structure would be constructed between Cabrillo Drive, Brent Street, and Main Street, on land owned by the City (see Figure 2-7, 2-8, and 2-9). This structure would contain five levels and would allow for 570 new parking spaces. Cabrillo Drive would be realigned and would meet Brent Street in a T-shaped intersection. Additionally, Borchard Drive would be extended south of Loma Vista Road within the Project Area. Realignment of streets is intended to facilitate pedestrian and vehicular traffic and to create a system of smaller blocks. In addition, the street network would provide direct access to both Hospital District parking garages from Loma Vista Road, Main Street, and Brent Street (see Figure 2-7).

2.5.5 Storm Water

The project will take advantage of several grassy areas throughout to allow for infiltration and treatment of rain water to comply with applicable NPDES requirements. The required runoff will be diverted to the proposed treatment facilities for treatment and infiltration. These treatment facilities will be designed to provided treatment and infiltration of $\frac{3}{4}$ " of runoff from the re-developed site (e.g. for 5 acres the required volume that needs to be treated and infiltrated is $5 \text{ ac} * \frac{3}{4}" = 13,620 \text{ cf}$). To prevent debris, sediment and trash from entering the proposed treatment facilities, all proposed storm drain inlets will be fitted with storm drain filters. These filters will also capture oils and grease, metals, gasoline suspended solids and pathogens. Also, all proposed storm drain inlets will be properly signed with stenciling to

discourage illegal dumping. Refer to Appendix F of the Hydrology Report for the description of these filters

2.5.6 Allowed Land Uses

The Hospital District is intended to be developed as a hospital campus that is consistent with the surrounding Midtown Corridor Code and sensitive to north and easterly residential neighborhoods. The Hospital District is an existing built environment with residences, commercial buildings, the existing hospital building, and surface parking. Ultimately much of the existing surface parking and nine existing buildings would be demolished to accommodate future redevelopment. Redevelopment is anticipated to include a variety of uses that would enhance the hospital campus. Allowable uses defined in the CMH Code are shown in Table 2-2.

Table 2-2
Allowed Land Uses & Permit Requirements for Hospital District Zones

Land Use	Zone		Additional Regulations
	SD:H1	OS	
Retail			
Bar, tavern, night club	UP	---	ZO 24.460
Gas Stations	---	---	
General Retail, except with any of the following features	P	---	
Alcoholic Beverage Sales	UP	---	ZO 24.460
Auto – or motor-vehicle related sales or services	---	---	
Drive-through facility	---	---	
Floor area over 20,000 sf	---	---	
Restaurant	P	---	
Services – Business, Financial, Professional			
Bank, financial services	P	---	
Business support service	P	---	
Medical/Dental	P	---	
Office	P	---	
Services – General			
Catering Service	P(2)	---	
Day care	P	---	
Drive – through service	---	---	
Lodging	P	---	
Mortuary, funeral home	---	---	
Personal services	P	---	
Safety services	P	---	
Transportation, Communications, Infrastructure			
Helicopter landing services	UP	---	
*Parking facility, public or commercial	P	---	

**Table 2-2
 Allowed Land Uses & Permit Requirements for Hospital District Zones**

Land Use	Zone		Additional Regulations
	SD:H1	OS	
*Wireless telecommunications facility	P	---	ZO 24.497 (3)
*Transit station or terminal	P	---	
*Utility equipment or substation	P	---	
<i>Parks and Open Space</i>			
Outdoor Dining	P	P	
Outdoor sports/recreation facilities	---	UP(4)	
Outdoor entertainment	---	UP(4)	
Farmer's Market	UP	UP(4)	
<i>Hospital</i>			
General Hospitals	P(2)	---	
Helicopter Landing Services	UP	---	
Ambulance Services (medical equipment, supplies, etc)	UP	---	
<i>Industry, Manufacturing & Processing, Wholesaling</i>			
Laboratory – Medical, analytical	P(3)	---	
Printing and publishing	P(3)	---	
Research and development	P	---	
<i>Recreation, Education & Public Safety</i>			
Adult Business	---	---	
Community Meeting	P	P	ZO 24.480
Health; fitness facility / Indoor sports & recreation	P	---	
Library, museum	P	---	
Live entertainment	UP	---	
Public parks and playgrounds	P	P	
School, public or private	UP	---	
Studio – Art, dance, martial arts, music, etc.	P	---	
<i>Residential</i>			
Dwelling, Multi-unit	P		
Dwelling, Accessory /Carriage house	---	---	
Dwelling – Single dwelling	---	---	
Home occupation	P	---	
Live/work	P	---	
Special Residence	P	---	

Source: Community Memorial Hospital District Development Code, Table 203.030

Changes to these land uses may occur due to changes being discussed with the Midtown Community Council

SD:H1 = CMH - Hospital District:

OS = Open Space:

P= Permitted Use;

UP = Use Permit Required:

--- = Not Allowed:

(1) A definition of each listed type is in Section 24.300 (Definitions) of the CMH Code

(2) Excluding sanitariums, nursing homes, convalescent homes, maternity homes or rest homes.

(3) Use not allowed on ground floor where frontage overlays occur, see Section 24.102 of the Regulating Plan:

(4) Use Permit as may be required by ZO 24.497

(*) Use allowed but must be screened from public view.



2.5.7 Development Potential

The Hospital District would develop in phases as discussed in more detail in Section 2.6. Eventually existing development would be replaced with CMH Code development. Many projects would be undertaken privately and would not be affiliated with the hospital. It is not possible to tell exactly what uses would be developed; however this analysis assumes some retail development, some office development and some hospital development. An estimate of development potential within the Hospital District is shown in Table 2-3.

**Table 2-3
Development Potential**

Area	Building *	Phase	Retail (sf)	Medical Office (sf)	Maximum Height ** (feet)
Loma Vista Road	11	II	0	33,150	55
Loma Vista Road	12	II	0	16,400	55
Loma Vista Road	13	II	0	12,000	55
Loma Vista Road	14	II	0	25,600	55
Borchard Drive	15	II	0	34,800	55
Brent Street	16 & 17	II	0	41,000	55
Cabrillo Drive	18	I	3,900	0	55
New Hospital	19	I	0	(356,000 + 121,000) or 252 beds	130
Old Hospital (reuse)	20	I		104,000	130
Total			3,900	266,950 and 252 bed Hospital	n/a

Source: Rasmussen and Associates, January 5, 2010. Notes: * See Figure 2-9 for building numbers and corresponding envelopes. **Maximum Height from CMH Draft Development Code, Massing Standards Table 200.020. The development potential shown in this table considers the most likely (and in most cases the most environmentally intensive) uses within the Hospital District (medical office). However, it should be recognized that the Hospital District permits other types of uses, including residences and various services and light industrial uses. Any specific use proposed in the future would need to undergo separate environmental review under CEQA.

The existing development that would be demolished is shown in Table 2-4, while the net increase in new development is shown in Table 2-5. The building envelopes that correspond to the estimates of development potential are shown on Figure 2-9. It is important to note that the assumptions used in the EIR analysis are not meant to serve as development caps. Rather, the development potential projections are used for analytical purposes in order to provide information about the possible effects of redevelopment of the Hospital District.

**Table 2-4
Existing Development to be Demolished**

Address	DU	Medical Office (sf)
2825 Cabrillo Drive	0	4,542 *
2841 Cabrillo Drive	0	5,346 *
2856 Cabrillo Drive	0	4,053 *
2815 Main Street	0	18,869 *
75 North Brent Street	1	0
85 North Brent Street	1	0
95 North Brent Street	1	0
107 North Brent Street	1	0
145 North Brent Street	0	12,696 *
Total	4	45,506

Notes: * Gross square feet of building area from Ventura County Assessor

**Table 2-5
Net Increase in Hospital District Development**

Scenario	DU	Commercial	Medical Office	Hospital
Proposed New Development	0	3,900	266,950	252 beds
Existing to be removed	4	0	45,506	242 beds
Net Increase	(4)	3,900	221,444	10 beds

Net increase obtained by subtracting the total existing development in Table 2-4 from the total proposed development in Table 2-3.

2.6 CMH CODE

“Form-based” codes emphasize design and building form in pedestrian areas and emphasize use constraints less than traditional zoning codes. The form-based coding was originally prescribed in the 2005 General Plan and has been implemented recently under the Midtown Corridors Code and here as the CMH Code. If adopted, the CMH Code would supersede the existing zoning. The proposed zoning is shown on Figure 2-6. Existing and proposed zoning is described below.

Midtown Corridor Code Zone (T.5.2). This area is regulated by the Midtown Corridors Development Code. Development within this zone would be consistent with the Urban Neighborhood Center Zone as allowed by the Midtown Corridor Development Code. The proposed CMH Code would modify the boundary of the Midtown Corridor Code as shown on Figure 2-6, and would prescribe the allowance of open space within the Midtown Corridors

Code for the open space area that is proposed southwest of the intersection of Loma Vista Road with the proposed Borchard Drive extension (see Figure 2-6). In addition, this project includes the expansion of a shopfront overlay frontage. The shopfront overlay frontage already exists within the Midtown Corridor Code, but would be expanded to cover the boundaries of Main Street parcels that face open space areas and streets, including Borchard Drive and Cabrillo Drive (see Figure 2-6). In addition, this project would trigger removal of the terminated vistas designation from Borchard Drive, which will no longer terminate at the boundary of the Midtown Code, but would continue northward as the Borchard Drive extension. The proposed project and CMH Code would not, however, directly affect development any of the parcels fronting Main Street, with the exception of 2815 Main Street, which is proposed for demolition to create a new street.

SD:H1. Development allowed under this zone would include laboratory, printing and publishing, research, education, recreation, public safety, hospital, residential, retail, services, transportation, communications, and infrastructure (see Table 2-3). Development would be subject to the form-based CMH Code that would allow either Commercial Block style development or Rowhouse development.

A Commercial Block style development is a building designed for occupancy by retail, service, and/or office uses on the ground floor street frontage, with upper floors configured for commercial use or for dwelling units. In some cases, such a building can be used to conceal an otherwise faceless or utilitarian building such as a parking garage. In such a case, this type shall be known as a “Liner”.

A Rowhouse consists of two or more detached two- or three-story dwellings with zero side yard setbacks. A Rowhouse may be used for non-residential purposes such as those shown in Table 2-2.

OS. Development allowed under this zone includes squares, plazas, parks, and open space (see Table 2-2).

Frontage Overlay. The public portions of a parcel’s frontage, except alleys, shall include at least one of the following frontage types: Shopfront, Gallery, or Arcade (section 24SD:H1.204). Forecourt frontage type is permitted where the facade is set back 5’ or more (section 24SD:H1.204). A “Porch” frontage is permitted for lots directly fronting a park (no intervening streets are present).

2.7 DEVELOPMENT PHASING

It is anticipated that development under the CMH Code would occur in phases, as described below.

Phase I: Phase I would occur from 2010 to 2014 and would include demolition of nine Project Area structures (45,506 sf of commercial/medical office use and 4 single family residences), construction of the new hospital building (356,000 sf and a net increase of 10 beds), adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital

support services and 104,000 sf for new backfill medical office reuse), abandonment of portions of existing streets and streetscapes, streetscape improvements, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the plan area would be consolidated and restriped with the addition of a 3,900 sf retail liner building (Building 18), which would be constructed adjacent the location of the future new garage and opposite the hospital open space plaza.

Phase II: Phase II would occur over a period of years and would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, buildings 11, 12, 13, 14, 15, 16 & 17 (as shown on Figure 2-9 and in Table 2-3), and the parking garage would be constructed during Phase II. Phase II development is estimated to be about 162,950 square feet of medical office uses (see Table 2-3).

Preliminary construction staging plans for Phase I are contained in Appendix F. Construction activities will not involve pile or pier driving.

2.8 PROJECT OBJECTIVES

The major project objectives include the following.

- 1) To construct a new seismically conforming hospital building in accordance with Senate Bill 1953, the Hospital Facilities Seismic Safety Act, which requires hospitals to meet more stringent seismic safety requirements.
- 2) To modernize the hospital and consolidate hospital operations through construction of a larger building to hold essential services, while housing non-essential services within the existing hospital facility.
- 3) To redevelop the area commonly known as the Hospital Triangle in a manner that integrates open space, activates the pedestrian realm and reinforces the connection with Main Street.
- 4) To manage and expand existing parking facilities in a manner that creates a pedestrian friendly environment, accommodates redevelopment and intensification of uses within the Hospital District and prevents overflow of hospital district demand to residential areas on the periphery of the Hospital District.

2.9 REQUIRED APPROVALS

The CMH Code would require the following discretionary approvals from the City of Ventura:



Discretionary approval is not required from any agency except for the City of Ventura.

- *Certification of the Final EIR*
- *Adoption of the Community Memorial Hospital District Development Code*
- *Modification of the Midtown Corridors Development Code to:*
 - Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the area covered by the Midtown Corridors Development Code
 - Designate open space in the area still to be governed by the Midtown Corridors Development Code
 - Add a shopfront overlay frontage type to interior street and open space frontages in the area still to be governed by the Midtown Corridors Development Code
 - Remove the terminated vistas designation from Borchard Street in the area still to be governed by the Midtown Corridors Development Code
- *Zone Change from Hospital (H), Professional Office (P-O), and Urban Center Zone (T5.2) to Hospital District (SD:H1) and Open Space (OS)*
- *Site Plan approval of the hospital building and other buildings to be constructed in Phase I of the proposed project (which would complete the approval of Phase I subject to design review).*
- *Design Review of the hospital building and other buildings to be constructed in Phase I of the proposed project*
- *A Memorandum of Understanding between the City and Community Memorial Health System*
- *City Council approval of the Water Supply Assessment*

By readjusting the Midtown Corridors Code boundaries to the west, the properties in the Project Area that do not front Main Street or form Midtown Corridor Code corner frontage would be removed from the Midtown Corridors Code boundaries and would be subject to the CMH Code. The properties subject to the CMH Code would be located south and west of the hospital. Figure 2-2(b) shows the zoning modification boundaries for the Midtown Corridors and the CMH Code. The portion of the Project Area that would be removed from the Midtown Corridors Code would be rezoned to Hospital District (SD:H1). The exiting Hospital Zone and Professional Office Zone would also be rezoned to SD:H1. Figure 2-2(c) shows the geographic extent of this area, which is roughly bounded by an alley to the west, Loma Vista Road to the north and North Brent Street to the east.

With regard to project approvals for the new hospital and ancillary projects within Phase I, discretionary project approvals for the new hospital building would include design review pursuant to the new Development Code. Further discretionary approvals are not anticipated, although non-discretionary approvals such as building permits and certificates of occupancy are expected. Other individual projects within the Hospital District that may be constructed as part of Phase II may require discretionary and/or non-discretionary approvals as proposed.

The Memorandum of Understanding (MOU) between the City and CMH establishes a agreement between the City and Community Memorial Health Systems (CMHS, the owner and operator of the hospital) regarding various obligations of the City and CMHS. The MOU would establish, for example, CMHS's responsibilities for relocating and/or maintaining public improvements (including landscaping, sidewalks, medians, and street lighting) and utilities on portions of Cabrillo Drive and Glen Street, providing new street connections in the area, and developing the public plaza in front of the hospital. The MOU would also include provisions regarding replacement parking and traffic mitigation fees. With regard to City obligations, the MOU would establish City obligations regarding rights-of-way for street connections, private improvements within public rights-of-way, the leasing of City property for the public plaza and certain buildings, the establishment of permit parking in the residential areas surrounding the hospital, and the design and construction of a parking garage and the Borchard Drive/Virginia Drive extension.

3.0 ENVIRONMENTAL SETTING

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting germane to each environmental issue can be found in their environmental sections found in Section 4.0, *Environmental Impact Analysis*.

3.1 REGIONAL SETTING

The Project Area is located in the City of Ventura, in western Ventura County about 60 miles northwest of Los Angeles and 25 miles southeast of Santa Barbara. The County is topographically diverse, with mountains, rich agricultural valleys, and distinct urban areas, all within close proximity of the Pacific Ocean. The Mediterranean climate of the region and coastal influence produce moderate temperatures year round, with rainfall concentrated in the winter months. The region is subject to various natural hazards, including earthquakes, landslides, flooding, and wildfires. The City of Ventura is located in the Santa Clara River Valley, framed on the north, east and south by steep mountains and by the Pacific Ocean on the west. The Project Area is located within the Midtown area of the City.

3.2 PROJECT AREA SETTING

The Project Area consists of approximately 10.4 acres of land in the Midtown portion of the City. The Project Area is triangular and is bordered by Loma Vista Road on the North and N. Brent Street on the East. The western boundary of the Project Area is irregular in shape, but generally corresponds to the northeastern edge of the parcels that exist along the eastern edge of Main Street between Loma Vista Road and Telegraph Road (see Figure 2-2). The Project Area consists of urban land that is currently developed with commercial and institutional uses. In addition, there four single family residences along N. Brent Street. Access to the Project Area locally is from North Brent Street, Loma Vista Road, Main Street, Borchard Drive and Cabrillo Drive. Regional access is provided by U.S. 101.

Figure 2-2 in Section 2.0 *Project Description* shows an aerial view of the Project Area and the existing development. Figure 2-3 in Section 2.0 *Project Description* shows photographs of the existing hospital as well as views of typical medical office and residential development within the Project Area.

Sensitive receptors in the Hospital District include patients at Community Memorial Hospital and residences located in the vicinity of the Hospital District, north of Loma Vista Road, about 250 feet to the north, or east of Brent Street, about 200 feet to the east. The closest school to the Hospital District is Saint Bonaventure High School, located at 3167 Telegraph Rd., 0.15 miles east of the Hospital District. In addition, the Ventura County Medical Center is located 0.22 miles northeast of the Hospital District.

3.3 SETTING FOR CUMULATIVE IMPACTS ANALYSIS

CEQA defines cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.



Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA Guidelines Section 15130 permits a lead agency to analyze a project's cumulative impacts via a list of "past, present, and probable future projects" or by utilizing a "summary of projections contained in an adopted general plan." The City selected the latter "plan" approach here rather than the "list" methodology. The cumulative impact analysis relies primarily on the forecasts of future growth in Ventura as envisioned in the 2005 General Plan EIR. The City's General Plan, and more specifically its 2005 update, contains growth projections for the City that are identified by particular land uses, including office use. Table 3-1 lists predicted citywide development intensity in 2025 from the 2005 General Plan EIR.

**Table 3-1
Cumulative Development**

Land Use	2025 Development Potential
Residential	8,318 units
Non-Residential	
Retail	1,241,377 sf
Office	1,213,214 sf
Industrial	2,235,133 sf
Hotel	530,000 sf
Non-Residential Total	5,219,724 sf

Source: City of Ventura, Final 2005 General Plan, Environmental Impact Report Supplement, June 2007.

Note that the cumulative growth projections above factor into the "no project" scenarios analyzed in this DEIR. That is, the "no project" scenario in the impact analyses assumes that growth will continue uniformly in accordance with the 2005 General Plan projections above and is actually a "no project plus cumulative" scenario.

Note, too, that while the Project Area is located geographically within the central western portion of the City of Ventura, cumulative development in the City of Ventura is spread geographically throughout the City. While the City selected the “plan” approach for its cumulative analysis, some impacts are not necessarily cumulatively considerable in relation to development that occurs further from the Project Area. For example, construction noise and air quality impacts associated with development under the CMH Code are not likely to contribute to such impacts in the eastern region of the City, whereas their relevance is more profound in closer proximity to the Project Area. Therefore, some individual cumulative impact discussions in the EIR may rely on a portion of the overall total future development, depending on the issue area and the type of impact. These are noted in the cumulative impact discussions as appropriate. Other issue areas consider only the overall General Plan buildout cumulative development. In addition to using the General Plan projections for cumulative impact analysis, planned and pending projects in the immediate site vicinity listed below were also used for certain cumulative analyses as noted throughout Section 4.0. Such planned and pending development within ½ mile of the Project Area is shown in Table 3-2. As shown in Table 3-2, planned and pending development within ½ mile of the project site would include development of 83 residential units and 83,416 sf of non-residential development.

**Table 3-2
Planned and Pending Development in the Vicinity**

Address	Residential Units	Commercial sf	Status	Approximate Distance
2200 E. Main Street	25 Condos	3,582 sf Commercial	Approved	0.5 mile
2170 E. Main Street	10 Condos	5,368 sf Commercial	Approved	0.5 mile
2260 E Thompson Boulevard	none	15,216 sf market	Under Construction	0.5 mile
SE Corner of Brent Street at Loma Vista Road (Cancer Center)	none	23,317 sf medical office *	Under Construction	240 feet
605 S. Mills Road	none	2,400 sf convenience store and gas station	In Plan Check	0.9 mile
4010 Telegraph Road & 4001 Ivy Street	48 senior units	none	Proposed	0.9 mile
4300 Telegraph Road	none	33,533 sf church addition	In Plan Check	1 mile
Total	83 units	83,416 sf	n/a	n/a

Source: <http://www.ci.ventura.ca.us/maps/kml/pen/docs/PendingList.pdf>
<http://www.ci.ventura.ca.us/maps/kml/pen/>

*Cancer Center total SF taken from Final IS/ND dated August 2009.



In addition to the pending cumulative projects listed above, it is worth noting that the City's growth projections already account for the development of the Cancer Center located at 147 North Brent Street. The Cancer Center is its own, independent project. It underwent CEQA environmental review in 2009 and was subsequently approved by the City. Unlike projects within the Hospital District Development Code that are a series of actions subject to the same design review framework, the Cancer Center is not part of the CMH Code area and is not in any way dependent upon the proposed hospital project. The Cancer Center was processed on a different time schedule (it was approved last year and analyzed with a negative declaration), and serves a different purpose than the CMH Code.

Notably, the Cancer Center site is not within the proposed CMH Code but rather is zoned Professional Office (P-O). The negative declaration for the Cancer Center, which may be reviewed at the City, states that "Adjacent to the [Cancer Center] site to the south and west are Community Memorial Hospital structures." Likewise, the Cancer Center negative declaration states that "[t]he [Cancer Center] would be located adjacent to the Community Memorial Hospital Master Plan area." The Cancer Center also has its own parking areas separate from Community Memorial Hospital.

For the purpose of the General Plan projections, the Cancer Center falls within "office" use. The negative declaration prepared for the Cancer Center indicates that the new center is comprised of approximately 23,317 square feet, which means there is more than sufficient square feet within the General Plan projections for cumulative office development (1,213,214 sq. ft.) to accommodate the Cancer Center. (Please note too that the Cancer Center project consisted of the relocation and replacement of existing medical office uses and does not actually constitute 23,317 sq. ft. of entirely new development.)

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section discusses the possible environmental effects of the proposed Community Memorial Hospital District Development Code for the issue areas identified as having the potential to experience significant impacts. “Significant effect” is defined by Section 15382 of the State CEQA Guidelines as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

The assessment of each issue area begins with a description of the current setting for the issue area being analyzed, followed by an analysis of the project’s effect within that issue area. The first subsection of the impact analysis identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City, other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

Class I, Significant and Unavoidable: An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.

Class II, Significant but Mitigable: An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.

Class III, Not Significant: An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

Class IV, No Impact or Beneficial: An effect that would reduce existing environmental problems or hazards or no change in environmental conditions would occur.

As indicated above, significant positive effects are also noted (Class IV) in addition to the adverse effects (Class I through III). Following each environmental effect discussion is a listing of recommended mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measures. In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect under the “Significance After Mitigation” heading. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.



Impacts Found To Be Less Than Significant

The following impacts were determined to be less than significant in the Initial Study (see Appendix A):

- Geology/Soils
- Agricultural Resources
- Hazards/Hazardous Materials
- Population and Housing
- Public Services and Recreation
- Biological Resources
- Land Use and Planning
- Mineral Resources
- Utilities and Service Systems

It is noted that this recirculated EIR contains additional discussion on Land Use and Planning as well as Water Supply. These two analyses were added to supplement the analysis contained in the Initial Study and supersede the discussions in the Initial Study (see Appendix A).

Furthermore, with regard to Hazards and Hazardous Materials a Phase I Environmental Site Assessment has been prepared for the project by Forbess Consulting Group since the preparation of the Initial Study (Appendix K). The Phase I report includes a summary and analysis of the Leaking Underground Storage Tank (LUST) Incident Reports for the project area. The Phase I report includes an analysis of close to 20 LUST sites, all but two of which are downgradient from the project site and do not pose a hazard to the site (because any contaminants would not migrate upgradient toward the Project Area). The two upgradient LUST sites are each about half a mile away from the Project Area and are being remediated. The Phase I report concludes that “[n]o recognized environmental conditions were identified as a result of our Phase I Environmental Site Assessment. No further assessment is recommended at this time.”

Finally, in addition to the existing discussion in the Initial Study regarding Geology and Soils impacts and, more specifically, the applicability of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983, the project site is within about 0.4 miles of an Alquist-Priolo Earthquake Fault Zone. However, the site is not within the zone. The requirements of the Alquist-Priolo Act apply only when the site is actually within the zone as its purpose is to avoid potential impacts related to surface rupture. With respect to the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983, a specific objective of the project is to construct a new seismically conforming hospital building in accordance with Senate Bill 1953, the Hospital Facilities Seismic Safety Act, which requires hospitals to meet more stringent seismic safety requirements. CMH will adhere to all applicable state study and review requirements. However, given that one of the project objectives is to upgrade facilities to meet current seismic requirements, there is no evidence that the project would create significant impacts with respect to surface rupture or seismicity.

4.1 AESTHETICS

This section evaluates potential impacts to views, visual conditions, and light and glare resulting from implementation of the CMH Code. The potential to affect views from a stated designated scenic highway was determined to be less than significant as discussed in the initial study that is included in Appendix A.

4.1.1 Setting

a. Visual Character of the Community Memorial Hospital District. The Hospital District encompasses about 10 acres of land in the Midtown area of Ventura, California. The District is bounded by Loma Vista Road on the north and Brent Street on the east and is generally bounded by an alley on the west [(see Figure 2-2 (c))]. The District is regionally accessible by U.S. 101 and locally accessible by Loma Vista Road, Main Street, Thompson Boulevard, and Brent Street. Existing land uses in the Hospital District and larger Project Area (the area affected by zoning modifications) include commercial, institutional, and residential uses. Commercial uses fronting Main Street include retail, restaurant, and shopping center uses. The institutional uses in the Hospital District include the Community Memorial Hospital (CMH) facility, while medical office buildings are the predominant commercial use. Residential uses in the Hospital District include four structures that front North Brent Street. Additionally, the Hospital District and larger Project Area contain parking facilities, including surface parking at nine locations in the Project Area and one parking structure near Loma Vista Road.

Figure 2-3 in Section 2.0 *Project Description*, shows the existing visual character of the Hospital District. The majority of buildings within the Hospital District are one and two stories tall and range from about 12-30 feet in height; however, the existing hospital is eight stories tall and has a maximum height of 96'8" to the roof and 110'2" to the penthouse. Hillsides to the north of the Hospital District are visible along the North Brent Street corridor and further to the south from the five points intersection (Main Street at Thompson Boulevard and Telegraph Road). The five points intersection was identified as an important view by the Ventura View Protection & Solar Access Task Force Final Report (April 20, 2009). The hillsides offer views of open space and areas of topographic interest. Figure 4.1-1 shows hillsides visible in the project vicinity. Existing development obscures views of the hillsides that lie north of the Midtown Area from other locations in the Project Area.

b. View Corridors. Principal travel corridors are important to an analysis of aesthetic features because they define the vantage points for the largest number of views. The 2005 General Plan identified Main Street as having scenic value because "Portions of this road offer views of the foothills and mountains to the north and east." The 2005 General Plan also acknowledges that "*Existing development obstructs portions of these views and future buildout would obstruct portions of views from Main Street.*"

Existing two-story commercial development along both sides of Main Street between Telegraph Road and Loma Vista Road already restrict views of the hillsides from Main Street. No views of the foothills or the ocean are available from this portion of Main Street. However, as mentioned above, views of the hillsides are visible from Main Street looking north at the five points

intersection (see Figure 4.1-1, photo 3). On the eastern boundary of the Hospital District, North Brent Street forms a corridor leading northward to the foothills above Foothill Road (see Figure 4.1-1, photo 2). As shown on Figure 4.1-1, views of the hillsides to the north are visible along this corridor.

c. Light and Glare. During the day, sunlight reflecting from roadways and structures is a primary source of glare, while nighttime light and glare can be divided into both stationary and mobile sources. Stationary sources of nighttime light include structural illumination, interior lighting, decorative landscape lighting, and streetlights. The principal mobile source of nighttime light and glare is vehicle headlights. This ambient light environment can be accentuated during periods of low clouds or fog. In general, nighttime lighting levels within and adjacent to the Hospital District are moderate, with abundant street and surface parking lot lighting as well as lighting that emanates from other surrounding one and two-story commercial development.

d. Regulatory Setting. Development in the Project Area is subject to the following regulatory programs aimed in part at the preservation of the visual character.

City of Ventura 2005 General Plan. The City of 2005 Ventura General Plan has several policies and actions aimed at reducing aesthetic impacts associated with buildout under the General Plan. The policies and actions applicable to the Hospital District are as follows.

- | | |
|--------------------|--|
| Policy 3A | <i>Sustain and complement cherished community characteristics.</i> |
| Action 3.2 | <i>Enhance the appearance of districts, corridors, and gateways (including views from highways) through controls on building placement, design elements, and signage.</i> |
| Action 3.5 | <i>Establish land development incentives to upgrade the appearance of poorly maintained or otherwise unattractive sites, and enforce existing land maintenance regulations.</i> |
| Policy 3C | <i>Maximize use of land in the city before considering expansion.</i> |
| Action 3.14 | <i>Utilize infill, to the extent possible, development to accommodate the targeted number and type of housing units described in the Housing Element.</i> |
| Policy 3E | <i>Ensure the appropriateness of urban form through modified development review.</i> |
| Action 3.23 | <i>Develop and adopt a form-based Development Code that emphasizes pedestrian orientation, integration of land uses, treatment of streetscapes as community living space, and environmentally sensitive building design and operation.</i> |
| Action 3.3 | <i>Require preservation of public viewsheds and solar access.</i> |



Photo 1 - Looking northeast on North Brent Street toward Loma Vista Road.



Photo 2 - Looking north on North Brent Street at Glen Street.



Photo 3 - View of the hillsides as seen from the intersection of Thompson Boulevard, Main Street, and Telegraph Road ("Five Points").

Photo 3 Source: Ventura View Protection Solar Access Task Force Final Report (April 20, 2009)



Midtown Corridor Code. Properties facing the hospital district with Main Street frontage between Telegraph Road and Loma Vista Road are within the Midtown Corridors code. The zoning for these properties will be amended to create frontage overlays along the property boundaries facing planned open space areas or street frontages within the Hospital District as shown in Figure 2-6. Any new development of these properties would be required to fully comply with the provisions of the Midtown Corridor Code, which defines the building types, setbacks, allowable uses, and maximum building heights.

CMH Code. If adopted, the CMH Code would supersede the zoning ordinance for all properties within the Hospital District (see Figure 2-2(a-c)). The CMH Code as discussed throughout this EIR would govern setbacks, building types, allowable uses, required parking and maximum building heights. In addition, the CMH Code would guide development of the Hospital District public realm, including street and open space improvements.

4.1.2 Impact Analysis

a. Methodology and Significance Thresholds. The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. This evaluation measures the existing visual environment against the proposed action, analyzing the nature of the anticipated change.

An impact is considered significant if development facilitated by the CMH Code would result in one or more of the following conditions, which are based upon the City's environmental checklist.

- *Substantial degradation of the existing visual character or quality of the community*
- *A substantial adverse effect on a scenic vista*
- *New sources of light or glare that would adversely affect day or nighttime views*

In addition, the Project would have a significant impact if it were to conflict with applicable policies and actions of the 2005 General Plan (as outlined above under subsection d.) that were designed to mitigate the impacts of adverse aesthetic effects.

b. Project Impacts and Mitigation Measures. Development Code effects on aesthetics and corresponding mitigation measures follow.

Impact AES-1 Phase I and Phase II development under the CMH Code would facilitate construction of buildings that could be larger in size and massing than existing buildings, thus altering the visual character of the Hospital District. However, the 2005 General Plan found that intensification and reuse would generally enhance visual character by adding appropriately scaled infill development. Intensification would also be consistent with the Midtown Corridors Code and would not create an aesthetically offensive condition or substantially degrade the existing visual character of the community. Thus,

**the impact with respect to visual character would be Class III,
*less than significant.***

The CMH Code would facilitate redevelopment of properties within the Hospital District. This area currently includes institutional, commercial, and residential buildings. Under Phase I, planned development in the Hospital District would include construction of a new 356,000 square foot hospital building that could be up to 130 feet tall, which is about 33 feet taller than the existing hospital building (20 feet taller than the existing penthouse). However, the new hospital is being designed such that the majority of the building would be about 10 feet lower than the existing hospital (86'6" at the roof parapet) and about 109' at the penthouse. The new building would be six stories, which is two stories less than the existing building. In addition, Phase I development would also include construction of a 3,900 square foot liner building along the southern branch of the realigned Cabrillo Drive [see Figure 2-7 and 2-9 (building 18)].

The SD:H1 Zone massing standards accommodate taller and wider buildings within the center of the zone, responding to medical and regulatory requirements, with shorter and narrower buildings at the edges of the zone to ensure a more human scale that is in scale with nearby residential and retail context areas (see Figure 2-9). Along the edges of the SD:H1 zone, maximum allowable heights would be 65 feet along North Brent Street at the location of the existing hospital, but would be a maximum of 55 feet tall along North Brent Street at the proposed hospital and farther to the south along North Brent Street, adjacent the future proposed new parking garage (see Figure 2-9).

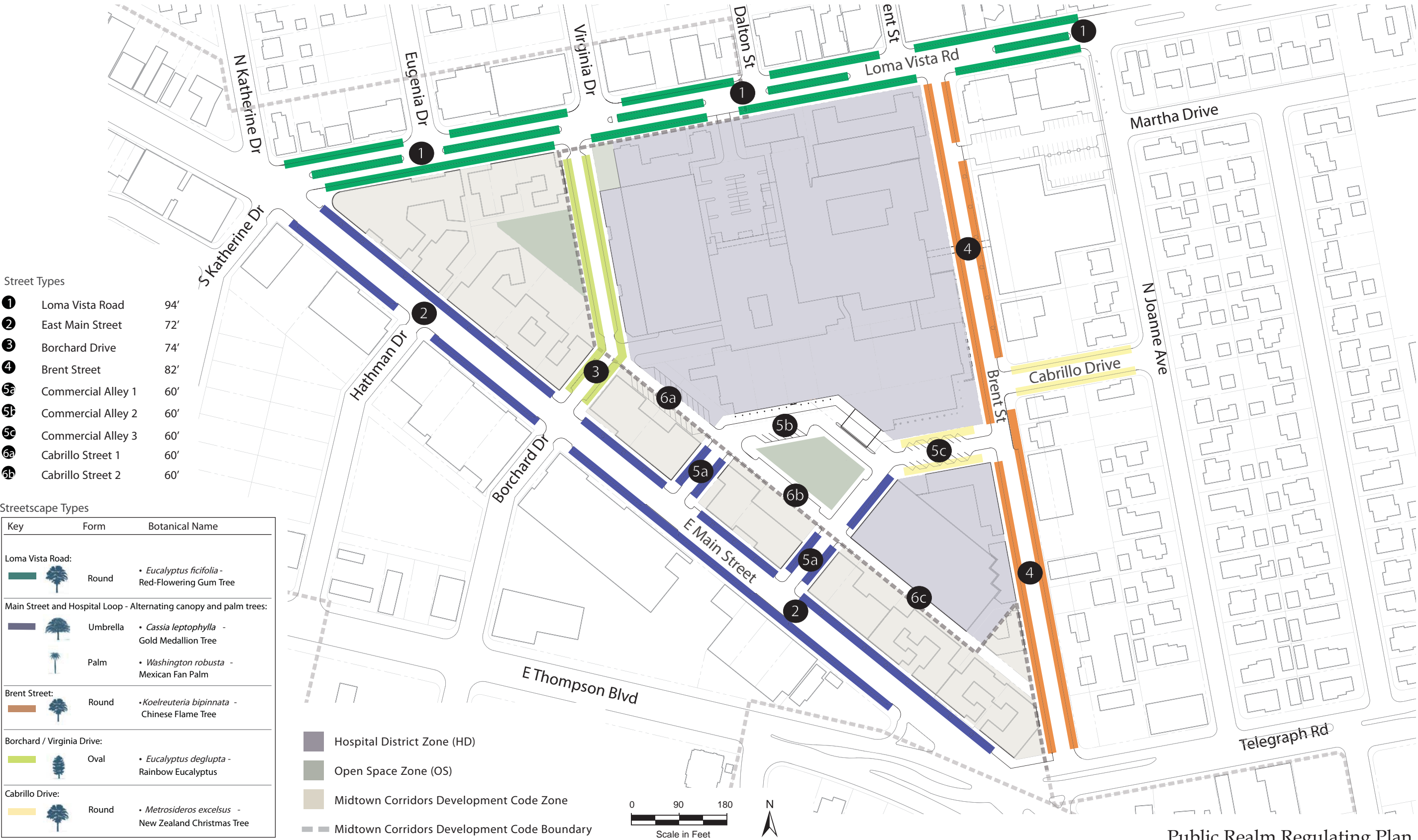
The CMH Code contains a Public Realm Regulating Plan, as shown on Figure 4.1-2. The streetscapes and civic spaces that connect the hospital buildings with the surrounding environment are urban in character, and are designed and landscaped in support of ground floor retail and civic uses. The Open Space Zone (OS) is comprised of two public open spaces. The first is a plaza on the south side of a realigned Cabrillo Street, providing a strong civic frontage for the major hospital building entry. The second open space plaza will be located at the southeast corner of the intersection of the Borchard Drive extension with Loma Vista Road, adjacent to the existing parking ramp and future liner buildings. A healing garden is also planned for the northern side of the new hospital building. Other public realm improvements include a Street Tree Program, which would determine the species of trees for each street in the Project Area (see Figure 4.1-2). Street trees include red-flowering gum trees, gold medallion trees, Mexican fan palms, Chinese flame trees, rainbow eucalyptus, and New Zealand Christmas trees.

A third open space area would be located within the Midtown Corridors Code, located along the west side of the Borchard Drive extension, providing a public open space for future mixed-use development under the Midtown Corridor Code. In addition, redevelopment of other properties under Phase II could occur as shown on Figures 2-8 and 2-9 in Section 2.0 *Project Description*. Phase II would occur over a period of years and would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, buildings 11, 12, 13, 14, 15, 16 & 17 (as shown on Figure 2-9 and in Table 2-3), and the parking garage would be constructed during Phase II. Phase II development is estimated to be about 162,950 square feet

of medical office uses (see Table 2-3). The intensification under Phase II would increase the size and mass of buildings located in the Hospital District. However, the intensification and redevelopment would improve the visual character of this area as it is currently comprised of older commercial, institutional, and residential buildings, in addition to a number of surface parking lots, some of which have deferred maintenance issues. As such, redevelopment within the Hospital District is anticipated to generally improve visual conditions.

The CMH Code strives to create new hospital facilities and commercial uses that support a walkable, pedestrian-oriented, and mixed-use district. The Development Code implements the following goals and policies of the Master Plan, which are intended to enhance the visual quality within the Hospital District.

- *The new public face of CMH would have a welcoming civic character*
- *Plazas would be well landscaped, frontages should be lively, and architecture should be appropriate in the context of the neighborhood*
- *Development would be sensitive in scale, character, and use to the existing surrounding neighborhood and urban context*
- *streetscapes and pedestrian spaces would be attractively designed*
- *The City's natural beauty and setting would be conserved, including scenic vistas, cultural and historic resources, hills, and trees*
- *Massing standards would allow for taller and wider massing standards in the center of the zone with shorter and narrower buildings at the edges of the zone to ensure a more humane scale*
- *Streetscapes and civic spaces that conjoin the hospital buildings with their urban neighbors would be fully urban in character, and would be designed and landscaped in support of ground floor retail and civic uses*
- *Civic open space would be inserted into what is currently the Hospital triangle*
- *There would be strategically located shifts in geometry and character, which coincide with the particular role and design speed of the associated streets to enhance the sense of place through unique positioning of buildings*
- *Wherever possible, developers would ensure that development is of human scale, primarily pedestrian oriented, and designed to create attractive streetscapes and pedestrian spaces*
- *A mix of land uses would be provided and would maintain pedestrian orientation*
- *The new hospital building would be hardscaped and landscaped with an entry garden and a dining terrace, with planting and low wall elements*
- *Gardens and/or forecourts on Loma Vista Road and North Brent Street would be landscaped and/or hardscaped*
- *Streetscape blocks would be composed of blocks sized for pedestrian use and defined by various street types*
- *Thoroughfares would be lean, using the minimum vehicular width practical*
- *Street networks would be interconnected, providing for a variety of alternate paths of movement*
- *Street networks would be spatially designed and varied to provide transitions between blocks in the Project Area*



Drawing Source: CMH Districe Development Code, July 2009

Figure 4.1-2
City of Ventura

- *A particular and appropriate transitional relationship between the private and public realm would be created*
- *Buildings and landscapes would define and animate a network of urban spaces, such as streets, sidewalks, parks, plazas, and squares, to provide a series of unique and valuable pedestrian-oriented places*

The proposed CMH Code implements applicable goals and actions of the 2005 General Plan as indicated in Table 4.1-1. In addition, the CMH Code has also been designed to interface with the Midtown Corridors Code. Consistent with the Midtown Corridors Code, the CMH Code for the Hospital District directs development of open space at the terminated vista of Virginia Drive. A roadway would be continued south under the CMH Code as the Borchard Drive Extension, but will be offset slightly such that viewers on the existing portion of Virginia Drive would not see the extension, but will see the open space plaza that is planned opposite the existing terminus of Virginia Drive on Loma Vista Road.

Table 4.1-1
General Plan Implementation Analysis

Applicable General Plan Policy and Actions	Analysis
<p>Policy 3A <i>Sustain and complement cherished community characteristics.</i></p> <p>Action 3.2 <i>Enhance the appearance of districts, corridors, and gateways (including views from highways) through controls on building placement, design elements, and signage.</i></p> <p>Action 3.5 <i>Establish land development incentives to upgrade the appearance of poorly maintained or otherwise unattractive sites, and enforce existing land maintenance regulations.</i></p>	<p>The proposed CMH Code facilitates consistency and prescribes cohesive development guidelines to the Hospital District. The Public Realm Regulating Plan implements district-wide corridor improvements that include street tree planting guidelines for each of the corridors and provision of open space areas. The CMH Code will guide new development of buildings to promote pedestrian scale, with pedestrian oriented uses on the ground floor and upper story office and residential development.</p> <p>The new development guidelines will establish unifying and hospital supportive uses as shown in Table 2-2, including but not limited to medical facilities and laboratories, multi-unit dwellings, live-work, retail, restaurants, banks and offices, lodging and daycare facilities. In addition, the CMH Code will facilitate provision of a long term parking program that will aid in serving redevelopment along Main Street between Loma Vista Road and Telegraph Road. These incentives will facilitate redevelopment of the Hospital District, which would eventually replace existing buildings and surface parking uses, many of which have deferred maintenance issues.</p> <p>These prescribed development characteristics implement General Plan Policy 3A and Actions 3.2 and 3.5.</p>
<p>Policy 3C <i>Maximize use of land in the city before considering expansion.</i></p> <p>Action 3.14 <i>Utilize infill, to the extent possible, development to accommodate the targeted number and type of housing units described in the Housing Element.</i></p>	<p>The CMH Code increases allowable heights within the existing Hospital Zone and the existing Professional Office zone (see Figure 2-5). The existing zoning regulations permit a maximum height of 45 feet and three stories (Municipal Code §24.280.070 and §24.230.070). Under the new CMH Code, allowable development intensity within the P-O zone would increase to allow a maximum height of 130 feet for the</p>



**Table 4.1-1
General Plan Implementation Analysis**

Applicable General Plan Policy and Actions	Analysis
	new hospital building. Massing standards would dictate the allowable building envelopes to ensure that buildings in the center of the Hospital District are tallest, with smaller building envelopes closer to the street corridors (see Figure 2-9). In addition, as discussed above, the CMH Code would allow for the introduction of multi-unit dwellings and live/work development within the District. These prescribed development characteristics implement General Plan Policy 3C and Action 3.14.
<p>Policy 3E <i>Ensure the appropriateness of urban form through modified development review.</i></p> <p>Action 3.23 <i>Develop and adopt a form-based Development Code that emphasizes pedestrian orientation, integration of land uses, treatment of streetscapes as community living space, and environmentally sensitive building design and operation.</i></p> <p>Action 3.3 <i>Require preservation of public viewsheds and solar access.</i></p>	<p>The CMH Code implements a form-based code that provides standards for specific “frontage types” that ensure an urban form and character that is suitable to Ventura. These “types” have been selected, and are defined herein, to ensure that the form of new buildings, and their location and configuration upon their lot, is specifically appropriate to Ventura, in particular to the Hospital District, as they abut existing neighborhoods.</p> <p>The CMH Code guides development of a pedestrian realm that is formed by the street corridors and open spaces. Development under the CMH Code will neither affect existing views of the hillsides, nor substantially affect solar access to surrounding properties (see Impact AES-2 and AES-3).</p> <p>These prescribed development characteristics implement General Plan Policy 3E and Actions 3.23 and 3.3.</p>

Phase I and Phase II development allowed within the proposed Hospital District would be of a similar scale as that currently permitted under the Midtown Corridor Code (see Figure 2-6 in Section 2.0, *Project Description*, for that boundary designation), which currently allows buildings up to six stories in height within the T-5.2 Urban Center Zone. Under the new CMH Code, buildings would generally be a maximum of 55 feet, except for the existing and proposed hospital building which could achieve a maximum height of 130 feet, with smaller building envelopes on the periphery between 55 and 65 feet (see Figure 2-9 in Section 2.0, *Project Description*, for the massing diagram).

The CMH Code as proposed would trigger some changes to the existing Midtown Corridors Code as listed under subsection 2.6 in Section 2.0 *Project Description*. As proposed, the following modifications to the Midtown Corridors Development Code would occur.

- 1) *Designate open space;*
- 2) *Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the Midtown Corridors Development Code (see Figure 2-6);*
- 3) *Add a shopfront overlay frontage type to interior street and open space frontages (see Figure 2-6); and*
- 4) *Remove the terminated vistas designation from Borchard Street.*

With these changes to the Midtown Corridors Code, Phase I and Phase II development under the CMH Code would not conflict with the Midtown Corridors Code. In addition, as discussed above, the Project implements goals of the 2005 General Plan and would generally improve the overall aesthetic appearance of the Hospital District. Therefore, no significant impact would occur with respect to creation of an aesthetically offensive condition or substantial degradation of the existing visual character of the community.

Mitigation Measures. No mitigation is necessary as significant impacts have not been identified for Phase I or Phase II.

Significance after Mitigation. This impact would be less than significant without mitigation.

Impact AES-2 Phase I and Phase II development that would be facilitated by the CMH Code could affect hillside views as seen from the Five Points intersection, but would not affect views from North Brent Street. In addition, development under the Code would create a new north-south viewing corridor along the Borchard Street Extension from which hillside views would be visible. Impacts to viewsheds would be Class III, *less than significant*.

As discussed earlier in the *Setting* (Section 4.1.1b) sensitive views from the Hospital District vicinity are limited due to the already built nature of the area. The only public corridor within the Hospital District vicinity from which one can view the hillsides is from North Brent Street (see Figure 4.1-1). As the Hospital District redevelops, new buildings would be constructed to replace existing buildings; however, because North Brent Street has a north-south alignment and because the Hospital District is adjacent to North Brent Street, new development within the Hospital District would not have an adverse effect on views from this corridor. In addition, a new view corridor would be created along the Borchard Drive extension. This new corridor would have both north-south and east-west alignment. The new north-south alignment would provide additional views of the hillsides and would create a new public view corridor.

It is noted that buildout within the Hospital District would create a new building of a similar scale as the existing hospital building under Phase I. The Ventura View Protection & Solar Access Task Force identified the five points intersection (Main Street, Telegraph Road & Thompson Boulevard) as an important intersection offering views of the hillsides to the north (View 14, see Figure 4.1-1). Redevelopment within the Hospital District under Phase I would create a new building of a similar scale as the existing hospital building, and the new building would extend further to the west. This new development has the potential to further obstruct views of the hillsides as compared with what is currently visible above existing development from this intersection (see Figure 4.1-1 for the Five Points view and Figure 2-8 in Section 2.0, *Project Description*, for proposed massing).

The Ventura View Protection Task Force Report acknowledged that “*some viewsheds will inevitably be lost as the city grows and prospers.*” The Report also acknowledged that “*taller or more*

intensive uses are appropriate along main corridor routes.” In addition, as previously noted, development accommodated under the CMH Code is similar to and in some instances less intense than development that would have been allowed under the Midtown Corridors Code. Moreover, development accommodated under the Midtown Corridors code (and under the preceding zoning) allows development at this corner (southern tip of the Project Area) of six stories, which would be visible in the foreground if a viewer is looking northward from the five points intersection as shown in Figure 4.1-1. This potential foreground six-story development would likely obscure views of the new hospital and other Phase I and Phase II development (see Figure 2-9 in Section 2.0, *Project Description*) from the Five Points intersection because of the proximity of the six-story development to the view location.

Development under the CMH Code has been designed to facilitate additional views and preserves views from North Brent Street. In addition, the Midtown Corridors Code allows buildings of up to six stories at the southern tip of the Project Area. Therefore, impacts to viewsheds would not be significant.

Mitigation Measures. Mitigation is not required for Phase I or Phase II as the development facilitated by of the CMH Code would not have adverse effects on viewsheds.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact AES-3 **The Hospital District is currently developed and there are existing sources of nighttime lighting along streets, from buildings and within parking lots. In addition, daytime glare is associated with parked cars and building windows. Phase I and Phase II development under the CMH Code would increase building density and building heights. However, the proposed CMH Code would not facilitate development that would adversely affect daytime or nighttime views, and redevelopment would preserve solar access for surrounding development. The impact with respect to light, glare and solar access would be Class III, *less than significant*.**

Development under the CMH Code would replace existing ambient nighttime lighting from streetlights, parking lot lights, and signage throughout the Hospital District. Existing sources of daytime glare from cars parked in the numerous surface lots would be reduced as much of the surface parking will be condensed into structures. In addition, the project would not create a new source of glare. Rather, the project would facilitate redevelopment of an existing urban area. Moreover, the CMH Code would require Major Design Review, according to the procedural requirements of Zoning Regulations Chapter (Sec. 24.545) for the following development types.

- 1) *All new development located within the SD:H1 Hospital District zone.*
- 2) *Additions and exterior changes to all structures providing for non-residential uses and all structures with over three dwelling units.*

Design review approval would require findings that *“The design and layout of the proposed development.... will not unreasonably interfere with the use and enjoyment of neighboring, existing, or future developments, and will not create traffic or pedestrian hazards”* and that *“The architectural design of the proposed development is compatible with the character of the surrounding neighborhood and all reasonable design efforts have been made to maintain the harmonious, orderly, and attractive development contemplated by this zoning ordinance and the comprehensive plan”* (Municipal Code § 24.545.100).

The CMH Code also specifies that pedestrian scaled lighting is to be utilized in open space areas along pathways only, and street lighting throughout the Hospital District is to be 14 feet tall. Frontage standards further recommend that decorative lights be used in entry ways of shop front structures. Therefore, because the Hospital District is an already developed urban area and because the existing municipal code and proposed CMH Code both assert controls regarding lighting and review of building materials, the impact with respect to creation of new light and glare sources would not be significant.

A shadow analysis was conducted to determine whether the massing associated with buildout of Phase I and Phase II of the CMH Code would affect the solar access of any neighboring developments (see figures 4.1-3 and Figure 4.1-4). *“Solar access is the ready availability of, or access to, unobstructed direct sunlight for the purposes such as passive space heating, daytime lighting, water heating and generating electricity.”* (Ventura View Protection & Solar Access Task Force Final Report, April 20, 2009). The most restrictive solar access calculation occurs on the shortest day of the year, the Winter solstice (December 21). In their April 20th Final Report, the Task Force recommended that Winter solstice between 10 AM and 2 PM be used as a baseline for solar access and suggested that shadows be permitted prior to 10:00 AM or after 2:00 PM, but not between these hours. The massing model (Figure 2-9 in Section 2.0, *Project Description*) was used in association with a shadow modeling tool to show how properties in the vicinity of the Hospital District would be affected by redevelopment under the CMH Code. The modeling results are shown on figures 4.1-3 and 4.1-4.

Figure 4.1-3 shows summer solstice shadowing by Phase I and Phase II buildout of Hospital District buildings between 10:00 AM and 2:00 PM. The results indicate that shadows would not extend across North Brent Street to cover existing medical offices or apartments, or affect any other buildings outside of the District. In addition, none of the proposed public open space areas would be shaded during the summer.

Figure 4.1-4 shows winter solstice shadowing between 10:00 AM and 2:00 PM for buildout of Phase I and Phase II buildings under the CMH Code. Figure 4.1-4 shows that at 10:00 AM, shadows extend northerly across Loma Vista Road and would marginally affect the southern portions of these properties, but that no shadow would be cast upon any building. In addition, the 10:00 AM shadow from the proposed new parking garage (Phase II) would cast a shadow over a portion of the southerly open space area that is within the Hospital District and the new Hospital building (Phase I) would shade the Healing Garden located between the new hospital building and the existing hospital building; however, this garden is privately owned by the hospital.

As the sun moves westerly, the shadows decrease in length and cover less of Loma Vista Road, and less of the open space area (see Figure 4.1-4, 12:00 PM). As the day progresses and the sun continues to move westerly, the shadows would lengthen from Main Street buildings and the proposed new hospital building. By 2:00 PM, shadows are cast within the District across open space areas including the southerly and northerly areas and remain within the proposed healing garden between the new and old hospital. Shadows also fall marginally on buildings aligned along the easterly edge of North Brent Street, opposite the Hospital District (see Figure 4.1-4, 2:00 PM). The two affected buildings are the cancer center that would be constructed on the southeast corner of the Loma Vista Road at Brent Street, and the parking garage/offices that are located across Brent Street to the east from the existing hospital.

Shadows falling on the cancer center as shown in the 2:00 PM image on Figure 4.1-4 are generated by the existing hospital building. In addition, it is noted that the shadow only affects about 3% of the roof, which would not substantially hinder direct sunlight for purposes such as passive space heating, daytime lighting, water heating and generating electricity. Moreover, this is the most severe shadow of winter solstice; therefore, the structure would be less affected between 10:00 AM and 2:00 PM for the remainder of the year.

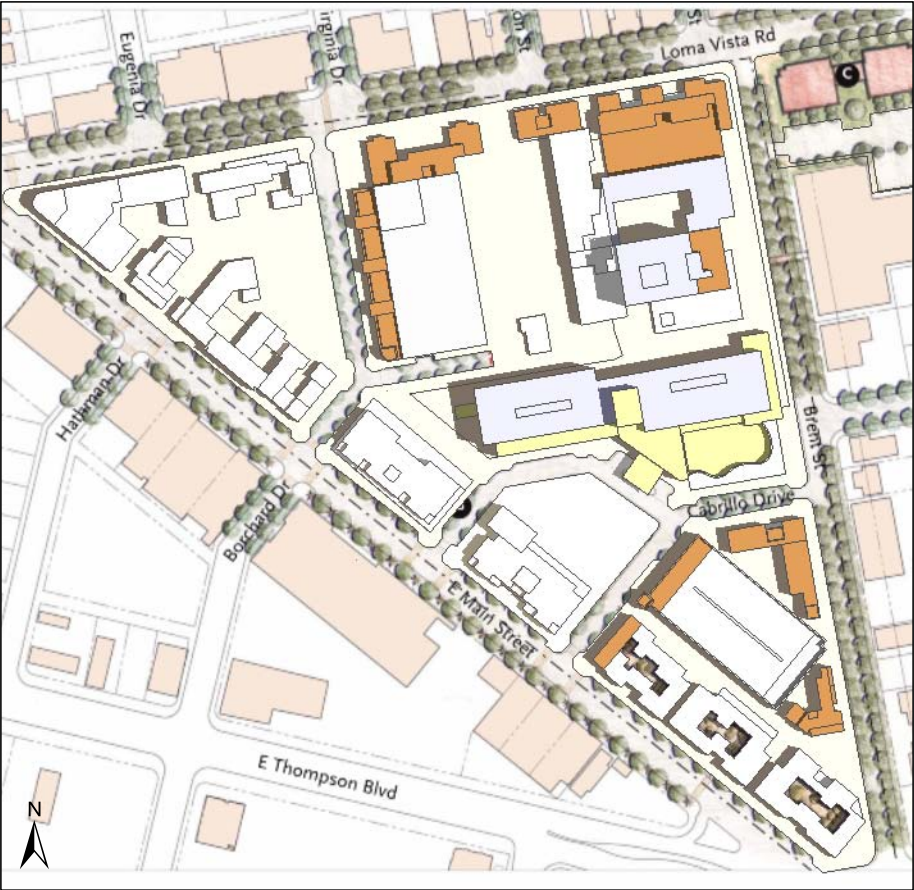
Shadows falling on the parking garage and offices opposite the existing hospital on the east side of North Brent Street are generated by the proposed new hospital building. This shadow would affect about 8% of the roof, which would not substantially hinder direct sunlight for purposes such as passive space heating, daytime lighting, water heating and generating electricity. Moreover, this is the most severe shadow of winter solstice; therefore, the structure would be less affected between 10:00 AM and 2:00 PM for the remainder of the year.

Shadows generated by development under the proposed CMH Code would not substantially hinder direct sunlight for purposes such as passive space heating, daytime lighting, water heating and generating electricity, as evidenced in Figures 4.1-3 and Figures 4.1-4. Therefore, the impact related to shadows and solar access would not be significant.

Mitigation Measures. Mitigation is not required for Phase I or Phase II as significant impacts have not been identified.

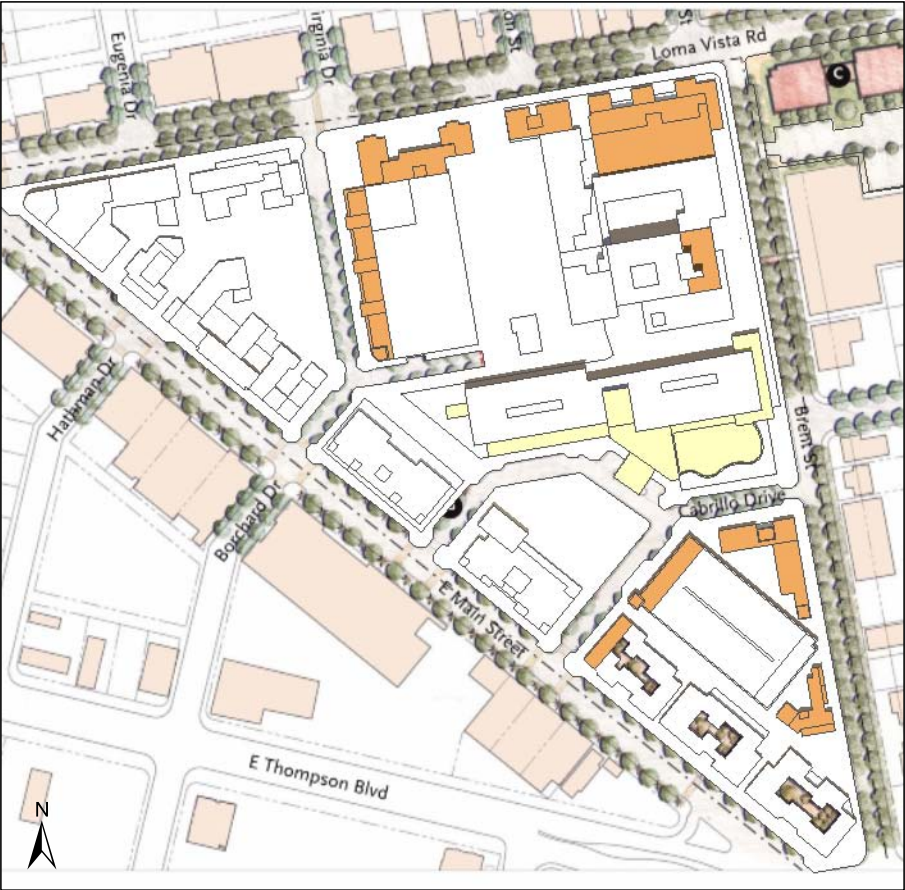
Significance After Mitigation. Impacts would be less than significant without mitigation.

c. Cumulative Impacts. As discussed in Section 3.0, *Environmental Setting*, buildout under the 2005 General Plan is anticipated to include about 8,000 dwelling units and about five million square feet of non-residential development. Underlying zoning for properties along Main Street adjacent the Hospital District to the west and south that are governed by the Midtown Corridors Code would allow development of up to six stories which could potentially obscure views from the five points viewing location and could potentially affect some other views. However, development under the Midtown Corridors Code would also facilitate



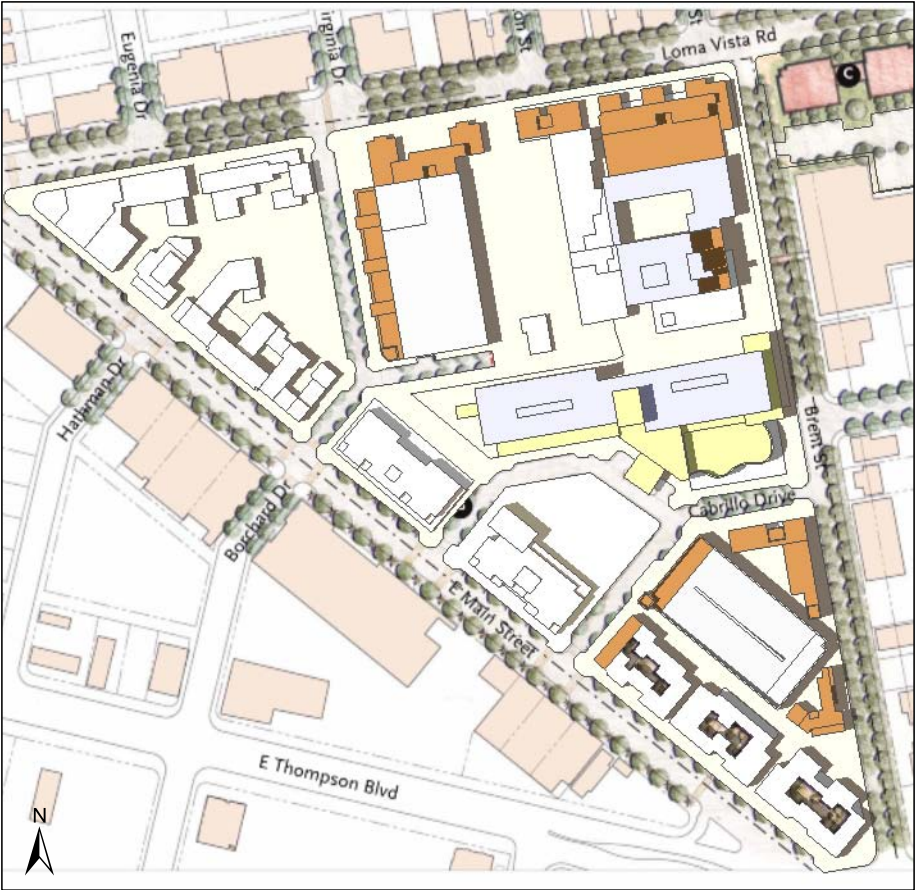
10:00 AM

SCALE: 1" = 300'



12:00 PM

SCALE: 1" = 300'



2:00 PM

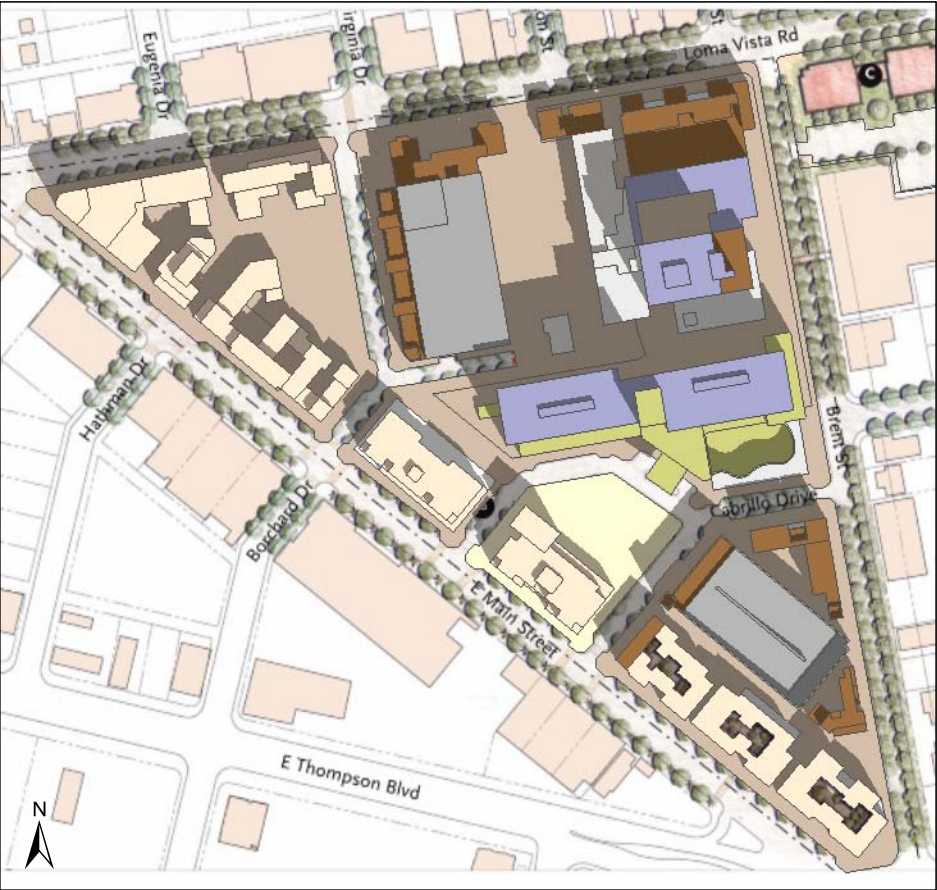
SCALE: 1" = 300'



2:00 PM view looking southwest.

SCALE: 1" = 300'

Summer Shadows - June 21st



10:00 AM

SCALE: 1" = 300'



12:00 PM

SCALE: 1" = 300'



2:00 PM

SCALE: 1" = 300'



10:00 AM view looking southwest.

SCALE: 1" = 300'



2:00 PM view looking northwest.

SCALE: 1" = 300'

Winter Shadows - December 21st

protection of corridor views and the creation of terminated vistas views. Such development would create a somewhat more urban character in the vicinity of the Hospital District. The 2005 General Plan FEIR identifies impacts relating to the change in visual character due to alteration of views from public view locations as unavoidably significant. The City Council adopted a Statement of Overriding Consideration for this cumulative change at the time the 2005 General Plan was adopted. This cumulative impact has not changed since the adoption of the 2005 General Plan, nor has the Plan's contribution to cumulative visual effects. Because cumulative aesthetic impacts would not be greater than what has already been acknowledged in conjunction with 2005 General Plan adoption, impacts would not be significant.

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4.2 AIR QUALITY

This section analyzes the impacts of the CMH Code upon local and regional air quality. Both construction and long-term impacts associated with population growth and associated growth in vehicle traffic and energy consumption are discussed. Impacts related to global climate change are discussed in Section 4.9, *Greenhouse Gas Emissions*.

4.2.1 Setting

a. Local Climate and Meteorology. The semi-permanent high pressure system west of the Pacific coast strongly influences California's weather. It creates sunny skies throughout the summer and influences the pathway and occurrence of low pressure weather systems that bring rainfall to the area during October through April. As a result, wintertime temperatures in Ventura are generally mild, while summers are warm and dry. During the day, the predominant wind direction is from the west and southwest, and at night, wind direction is from the north and generally follows the Santa Clara River Valley.

Predominant wind patterns are occasionally broken during the winter by storms coming from the north and northwest and by episodic Santa Ana winds. Santa Ana winds are strong northerly to northeasterly winds that originate from high pressure areas centered over the desert of the Great Basin. These winds are usually warm, very dry, and often full of dust. They are particularly strong in the mountain passes and at the mouths of canyons.

Daytime summer temperatures in the area average in the high 70s to the low 90s. Nighttime low temperatures during the summer are typically in the high 50s to low 60s, while the winter high temperatures tend to be in the 60s. Winter low temperatures are in the 40s. Annual average rainfall in Ventura ranges from about 14 to 16 inches, the majority of which falls in winter months.

Two types of temperature inversions (warmer air on top of colder air) are created in the Ventura County area: subsidence and radiational (surface). The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high pressure area to the low pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but is most evident during the summer months. Surface inversions are formed by the more rapid cooling of air near the ground at night, especially during winter. This type of inversion is typically lower and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed. The primary air pollutant of concern during the subsidence inversions is ozone, while carbon monoxide and nitrogen oxides are of greatest concern during winter inversions.

b. Local Regulatory Framework. Both the federal and state governments have established ambient air quality standards for the protection of public health. The U.S. Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) of the California Environmental Protection Agency is the state equivalent. Local control in air quality management is provided by the CARB through county-level Air Pollution Control Districts



(APCDs). The CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The CARB has established 14 air basins statewide. In addition, the City further regulates air quality through the City's Air Quality Ordinance (Ordinance 93-37). This ordinance requires developers of projects that generate emissions exceeding Ventura County APCD (VCAPCD) significance thresholds to pay air quality impact fees that are placed in a transportation demand management (TDM) fund that is used by the City to offset project emissions through implementation of regional air quality programs.

The USEPA has set primary national ambient air quality standards (NAAQS) for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), suspended particulates, known as PM₁₀ (particulate matter with a diameter of 10 microns or less) and PM_{2.5} (particulates of less than 2.5 microns in diameter), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, the State of California has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the federal standards. Table 4.2-1 lists the current federal and state standards for regulated pollutants.

**Table 4.2-1
Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	---	0.09 ppm
	8-Hour	0.075 ppm	0.07 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.03 ppm
	1-Hour	---	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	---
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	---	0.25 ppm
PM ₁₀	Annual	---	20 µg/m ³
	24-Hour	150 µg/m ³	50 µg/m ³
PM _{2.5}	Annual	15 µg/m ³	12 µg/m ³
	24-Hour	35 µg/m ³	--
Lead	30-Day Average	---	1.5 µg/m ³
	3-Month Average	1.5 µg/m ³	---

ppm = parts per million

µg/m³ = micrograms per cubic meter

Source: California Air Resources Board, www.arb.ca.gov/research/aaqs/aaqs2.pdf, April 1, 2008.

Ventura County has been listed as “moderate nonattainment” for the eight-hour ozone standard with an estimated attainment date of June 2010.



Ventura is located in the Ventura County portion of the South Central Coast Air Basin. The VCAPCD is the designated air quality control agency in the Ventura County portion of the Basin. The Ventura County portion of the South Central Coast Air Basin is a state and federal non-attainment area for ozone (1-hour and 8-hour, respectively) and a state non-attainment area for suspended particulates (PM₁₀ & PM_{2.5}). In addition, though the Ventura County portion of the South Central Coast Air Basin is in attainment for the state and federal carbon monoxide standards, carbon monoxide can potentially be a problem at heavily congested intersections.

c. Characteristics and Effects of Key Pollutants. The general characteristics and potential health effects of the pollutants of primary concern in Ventura County are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG). Nitrogen oxides are formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in serious concentrations between the months of May and October. Ozone is a pungent, colorless toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Suspended Particulates. PM₁₀ is small particulate matter measuring no more than 10 microns in diameter. It is mostly composed of dust particles, nitrates, and sulfates. PM₁₀ is a by-product of fuel combustion and wind erosion of soil and unpaved roads, and is directly emitted into the atmosphere through these processes. PM₁₀ is also created in the atmosphere through chemical reactions. Particles less than 10 micrometers in diameter (PM₁₀) pose a health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers (=microns) in diameter (PM_{2.5}) are referred to as “fine” particles and are believed to pose the greatest health risks. Because of their small size (approximately 1/30th the average width of a human hair), fine particles can lodge deeply into the lungs. Fine particulate matter is composed primarily as a by-product of combustion, while particulate matter between 2.5 and 10 microns is mostly dust from roads and grinding or crushing operations. Fine particulate matter poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body’s mechanisms for clearing the respiratory tract or by acting as carriers of an adsorbed toxic substance.

Toxic Air Contaminants. An important fraction of the particulate matter emission inventory is that formed by diesel engine fuel combustion. Particulates in diesel emissions are very small and readily respirable. The particles have hundreds of chemicals adsorbed onto their surfaces, including many known or suspected mutagens and carcinogens. The California Office of Environmental Health Hazard Assessment (OEHHA) reviewed and evaluated the potential for diesel exhaust to affect human health, and the associated scientific uncertainties (California EPA, CARB, April 1998). Diesel particulate emissions were identified by the ARB as a toxic air contaminant in 1998. Based on the available scientific evidence, a level of diesel PM exposure below which no carcinogenic effects are anticipated has not been identified. The

Scientific Review Panel that approved the OEHHHA report determined that based on studies to date that 3×10^{-4} ($\mu\text{g}/\text{m}^3$)-1 is a reasonable estimate of the unit risk for diesel PM. This means that a person exposed to a diesel PM concentration of $1 \mu\text{g}/\text{m}^3$ continuously over the course of a lifetime has a 3 per 10,000 chance (or 300 in one million chance) of contracting cancer due to this exposure. Based on an estimated year 2000 statewide average concentration of $1.26 \mu\text{g}/\text{m}^3$ for indoor and outdoor ambient air, about 380 excess cancer cases per one million population could be expected if diesel PM concentrations remained the same (CARB, October 2000).

Diesel PM emissions are estimated to be responsible for about 70% of the total ambient air toxics risk. In addition to these general risks, diesel PM can also be responsible for elevated localized or near-source exposures ("hot spots"). Depending on the activity and nearness to receptors, these potential risks can range from small to 1,500 per million or more (CARB, October 2000). Risk characterization scenarios have been conducted by the CARB staff to determine the potential excess cancer risks involved due to the location of individuals near to various sources of diesel engine emissions, ranging from school buses to high volume freeways.

The ARB (April 2007) estimates that in 2005, off-road diesel vehicles were responsible for 24 percent of the total statewide diesel mobile source PM emissions, and 19 percent of the total statewide diesel mobile source NO_x emissions. Consequentially, the ARB adopted a regulation in July 2007 that would require owners of in-use off-road diesel vehicles to modernize their fleets by replacing engines with newer, cleaner ones (re-powering), replacing vehicles with newer vehicles equipped with cleaner engines, retiring older vehicles, operating higher emitting vehicles less often (designating them as low-use vehicles) and applying exhaust retrofits that capture and destroy pollutants before they are emitted into the atmosphere.

The regulation establishes fleet average emission rate targets for both diesel PM and NO_x. By the applicable compliance date each year, the regulation would require each fleet to demonstrate either that it meets the fleet average emission rate target for diesel PM or that it has applied the highest level verified diesel emission control system (VDECS) to 20 percent of the total horsepower of its fleet in the past year. The regulation is expected to reduce 48 tons per day (tpd) NO_x and 5.2 tpd of PM statewide in Year 2020. These reductions represent a 32 percent reduction in NO_x and a 74 percent reduction in PM from the Year 2020 emissions that would otherwise occur in the absence of the regulation. As part of this regulation, no equipment would be allowed to idle for greater than 5 minutes unless necessary for the operation of that equipment.

Large fleets (more than 5,000 total hp) would have to begin meeting the fleet average targets on March 1, 2010. Medium fleets would need to begin meeting the fleet average on March 1, 2013, and small fleets (less than or equal to 42,500 hp, as defined below) would have until March 1, 2015. The fleet average targets would decline over time until 2020 (or until 2025 for small fleets). Small fleet requirements are generally delayed by 5 years behind those for medium fleets. As this regulation is applied over the construction timeframe for the Hospital District development, the potential for impact will decline as cleaner equipment will be in use.

On December 12, 2008, the CARB approved a new regulation to significantly reduce emissions from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance requirements between 2011 and 2023. This regulation

would affect all construction delivery vehicles, which are a substantial portion of the total construction diesel exhaust emissions. In addition to these regulations on existing trucks and buses, stricter standards for new heavy-duty diesel-engines and vehicles were adopted in October 2008.

Carbon Monoxide. Carbon monoxide, a colorless, odorless, poisonous gas, is a local pollutant that is found in high concentrations only very near the source. The major source of carbon monoxide is automobile engines. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

d. Current Ambient Air Quality. The Air Quality Monitoring Station at El Rio is the nearest to the City of Ventura and most representative of air quality in the Hospital District. The El Rio monitoring station measures ozone, NO₂, PM₁₀, and PM_{2.5}. The closest monitoring station reporting CO is the Goleta-Fairview station in Santa Barbara. There are no CO monitoring stations in Ventura County. Table 4.2-2 lists the ambient air quality data for the El Rio and Goleta-Fairview monitoring stations.

Ozone concentrations at the El Rio monitoring station exceeded the state standard twice during the 2006-2008 period and federal standards were not exceeded. Measured concentration samples of PM₁₀ at El Rio exceeded state standards between 2 to 4 times per year from 2006-2008. Federal exceedances occurred once in the year 2007; 2006 and 2008 did not report any exceedances of the federal standard. Estimates were used due to a lack of samples. Ventura County is in attainment for the federal PM_{2.5} standard. Neither carbon monoxide nor nitrogen dioxide exceeded federal or state standards at the El Rio station. Carbon monoxide concentrations at the Goleta-Fairview monitoring station did not exceed state or federal standards during the 2006-2008 period.

The major sources of ozone precursors in Ventura County are motor vehicles and other mobile equipment, solvent use, pesticide application, the petroleum industry, and electric utilities. The major sources of PM₁₀ are road dust, construction, mobile sources, and farming operations. Locally, Santa Ana winds are responsible for entraining dust and occasionally causing elevated PM₁₀ levels.

e. Air Quality Management Plan. The Federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of AQMPs and adopted rules and regulations by each local APCD and AQMD, which are submitted for approval to the CARB and the USEPA. The goal of an AQMP is to reduce pollutant concentrations below the National Ambient Air Quality Standards (NAAQS) through the implementation of air pollutant emissions controls.

**Table 4.2-2
Ambient Air Quality Data Concentrations**

Pollutant	Air Pollution Data			
	2006	2007	2008	2009
Ozone, ppm - maximum hourly concentration (ppm)	0.089	0.089	0.086	0.099
Number of days of state exceedances (>0.09 ppm)	0	0	0	1
Number of days of federal exceedances (>0.12 ppm)	0	0	0	0
Ozone, ppm - maximum 8-hour concentration (ppm)	0.070	0.072	0.074	0.077
Number of days of State exceedances (>0.07 ppm)	0	1	1	1
Number of days of federal exceedances (>0.08 ppm)	0	0	0	1
Carbon Monoxide, ppm - Worst 8 Hours ^a	0.80	1.10	0.60	0.60
Number of days of state 1-hour exceedances (>20.0 ppm) ^a	0	0	0	0
Number of days of state 8-hour exceedances (>9.0 ppm) ^a	0	0	0	0
Nitrogen Dioxide, ppm - Worst Hour	0.050	0.053	0.052	0.051
Number of days of state exceedances (>0.25 ppm)	0	0	0	0
Particulate Matter <10 microns, maximum concentration in $\mu\text{g}/\text{m}^3$ (State/Fed)	119.1/119.4	248/245.5	79.0/79.8	99.9/97.4
Number of samples of state exceedances (>50 $\mu\text{g}/\text{m}^3$), <u>24-hour average concentration</u>	4	2	3	2
Number of samples of federal exceedances (>150 $\mu\text{g}/\text{m}^3$), <u>24-hour average concentration</u>	0	1	0	0
Particulate Matter <2.5 microns, maximum 24-hour average concentration in $\mu\text{g}/\text{m}^3$	29.8	39.9	31.8	24.5
Estimated number of days of federal 24-hour average exceedances (>65 $\mu\text{g}/\text{m}^3$)	0	0	0	0

Source: CARB, Air Quality Data Statistics; available at <http://www.arb.ca.gov/adam/topfour/topfour1.php>
All data except for CO data is from the El Rio Monitoring Station

^a No CO monitoring is available in Ventura County, the closest point is the Goleta-Fairview site results.

The USEPA designated Ventura County a moderate nonattainment area for the 8-hour ozone standard based on Ventura County's ozone levels over the previous three years in 2004. Moderate ozone nonattainment areas are required to obtain the federal 8-hour ozone standard



by June 15, 2010. On February 14, 2008, the CARB formally requested that the USEPA reclassify Ventura County to a serious 8-hour ozone nonattainment area. This means that Ventura County must meet the federal 8-hour ozone standard by June 15, 2013. The VCAPCD released the Final 2007 AQMP in May 2008. The 2007 AQMP presents new control measures intended to bring the County into compliance by the 2013 date. The 2007 AQMP emission factors based its population forecasts on the 2008 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP).

The 2007 AQMP also presents the 2003 – 2005 Triennial Assessment and Plan Update required by the California Clean Air Act (CCAA). The goal of the CCAA is to achieve more stringent health-based state air quality standards at the earliest practicable date. Ventura County is designated a severe nonattainment area under the CCAA and must meet many of the most stringent requirements under this act.

While the Final 2007 AQMP contains some additional local control measures, most of the emissions reductions that Ventura County needs to attain the federal 8-hour ozone standard and continued progress to the state ozone standard will come from the CARB's 2007 SIP. This SIP contains comprehensive emission reduction programs that focus on reducing emissions from mobile sources, consumer products, and pesticides to significantly improve air quality. Based on photochemical modeling and the use of the local and state control measures, Ventura County is projected to attain the federal ozone standard by 2013.

f. Sensitive Receptors. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools and hospitals. Sensitive receptors in the Hospital District include patients at Community Memorial Hospital and residences located in the vicinity of the Hospital District, north of Loma Vista Road, about 250 feet to the north, or east of Brent Street, about 200 feet to the east. The closest school to the Hospital District is Saint Bonaventure High School, located at 3167 Telegraph Rd., 0.15 miles from the Hospital District. In addition, the Ventura County Medical Center is located 0.22 miles northeast of the Hospital District.

4.2.2 Impact Analysis

a. Methodology and Significance Thresholds. The analysis of the proposed Community Memorial Hospital District Development Code air quality impacts follows the guidance and methodologies recommended in the Ventura County Air Quality Assessment Guidelines (October 2003). Analysis is based on the development projections contained in Table 2-3, within Section 2.0, *Project Description*.

Projects and programs requiring an analysis of consistency with the AQMP include general plan updates and amendments, specific plans, area plans, large residential developments and large commercial/industrial developments. The proposed CMH Code would regulate

development within an area that is about 10 acres. The Project is subject to the AQMP consistency analysis. The consistency analysis evaluates the following questions:

- *Are the population projections used in the plan or project equal to or less than those used in the most recent AQMP for the same area?*
- *Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?*
- *Have all applicable land use and transportation control measures from the AQMP been included in the plan or project to the maximum extent feasible?*

If the answer to all of the above questions is yes, then the proposed project or plan is considered consistent with the AQMP. If the answer to any one of the questions is no, then CMH Code implementation could potentially delay or preclude attainment of the state ozone standard. This would be considered inconsistent with the AQMP.

To analyze Project-generated emissions, the VCAPCD's *Air Quality Assessment Guidelines* recommends significance thresholds for projects proposed in Ventura County. Under these guidelines, projects that generate more than 25 lbs per day of ROG or NO_x are considered to individually and cumulatively jeopardize attainment of the federal ozone standard and thus have a significant adverse impact on air quality. The VCAPCD's 25 pounds per day thresholds for ROG and NO_x do not apply to construction emissions since such emissions are not permanent. Nevertheless, for construction impacts, the VCAPCD recommends imposition of mitigation if emissions of either pollutant exceed 25 pounds per day. The VCAPCD also ~~recommends~~ requires minimizing fugitive dust through various dust control measures as documented in Rule 55.

The VCAPCD has not established numeric thresholds for particulate matter. However, a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property is considered to have a significant air quality impact by the VCAPCD. This threshold is particularly applicable to the generation of fugitive dust during construction grading operations.

Pursuant to the Initial Study in Appendix A, the Project would have a significant effect if it were to do any of the following.

- *Conflict with or obstruct implementation of the applicable air quality plan.*
- *Violate any air quality standards or contribute substantially to an existing or projected air quality violation.*
- *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).*
- *Expose sensitive receptors to substantial pollutant concentrations.*

No specific air quality standards have been established for diesel particulate emissions or many other toxic pollutants. Instead, significance thresholds are determined based on an analysis of the number of excess cancers relative to a chosen risk level. Excess cancer risks are defined as those occurring in excess of or above and beyond those risks that would normally be associated with a location or activity if toxic pollutants were not present.

The USEPA considers for risk management those pollutants that could cause carcinogenic risk between one in 10,000 (1.0×10^{-4} or 1.0E-04) and one in one million (1.0×10^{-6} or 1.0E-6), with the latter criteria generally used for development of Preliminary Remediation Goals (PRG's). Passage of Proposition 65 (encoded in California Health and Safety Code Section 25249.6) in 1986 prohibits a person in the course of doing business from knowingly and intentionally exposing any individual to a chemical that has been listed as known to the state to cause cancer or reproductive toxicity without first giving clear and reasonable warning. For a chemical that is listed as a carcinogen, the "no significant risk" level under Proposition 65 is defined as the level which is calculated to result in not more than one excess case of cancer in 100,000 individuals (1×10^{-5}) exposed over a 70-year lifetime. The VCAPCD recommends that this cancer risk level (also reportable as 10 in one million) be used as the significance threshold for toxic air contaminants (VCAPCD, October 2003). To provide a perspective on this risk, it is noted that the American Cancer Society (2007) reports that in the U.S., men have a one in two chance (0.5 probability) and women about one in three chance (0.3) probability of developing cancer during a lifetime, with one in four deaths (0.23) in the U.S. attributed to cancer. Given this background carcinogenic risk level in the general population, application of a 10^{-5} excess risk limit means that the contribution from a toxic hazard should not cause the resultant risk for the exposed population to exceed 0.5001 for men and 0.33001 for women. In addition, the VCAPCD recommends that the non-carcinogenic hazards for TACs at ground level should not exceed a hazard index of greater than one.

The initial study found that the Project would not have the potential to create objectionable odors that would affect a substantial number of people; therefore, this impact is not discussed in the main body of the EIR.

b. Project Impacts and Mitigation Measures.

Impact AQ-1 Phase I and Phase II redevelopment under the CMH Code would be consistent with the 2005 Ventura General Plan and the Ventura County AQMP population forecasts. Therefore, impacts related to the consistency with the AQMP are Class III, less than significant.

Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. The population forecasts upon which the Ventura County AQMP is based are used to estimate future emissions and devise appropriate strategies to attain state and federal air quality standards. When population growth exceeds the forecasts upon which the AQMP is based, emission inventories could be surpassed. This could affect attainment of standards.

The Ventura County AQMP relies on the most recent population estimates developed by the Metropolitan Planning Organization (MPO). SCAG acts as the MPO for Ventura County. Accordingly, the Ventura County AQMP uses SCAG's 2008 RTP for its population forecasts. SCAG's projected 2025 population for Ventura is 127,032.

The current population for the City of Ventura is 108,787 persons (California Department of Finance, 2009). The projected 2025 population under the 2005 General Plan is 126,153 for the year 2025. This is within the 2007 AQMP population projections for the City. See Table 4.2-3 for a comparison AQMP and 2005 General Plan population forecasts.

**Table 4.2-3
Comparison of 2025 Population Projections**

	Population
Ventura AQMP 2025 Population Projections	127,032
2005 General Plan 2025 Population Projection	126,153
<i>Estimated Persons Below AQMP Projection</i>	879

Source: 2005 City of Ventura General Plan EIR.

The CMH Code is not anticipated to increase growth in the City; rather it would direct infill and intensification that was envisioned under the 2005 General Plan. As indicated in Table 2-3 in Section 2.0, *Project Description*, the Hospital District is anticipated to accommodate primarily medical office and hospital uses, with some retail development. The net increase in development within the Hospital District is forecast at 3,900 square feet of retail use (Phase I), 10 beds in the hospital (Phase I), and 221,444 square feet of medical office development (Phase I and Phase II). Phase I includes construction of the new hospital building, adaptive reuse of the existing hospital (104,000 sf of new leased medical office use and 121,000 sf of backfill with non-essential services), construction of a new 3,900 square foot retail liner building, and construction of the roadway network within the Hospital District. Phase II, includes buildout of the remainder of the Hospital District including construction of 162,950 square feet of medical office uses and the new 570 space parking garage.

Residential uses would be permitted pursuant to Table 2-2; however, CMH is not proposing any residential uses. In the event that a private developer were to propose a mixed use development with upper level live/work or multi-family residential development, the number of units would be limited by the available area. Any redevelopment to incorporate residential uses would be anticipated to contribute towards meeting the overall housing development goals and would be within the parameters of the 8,000 dwelling units forecast under the 2005 General Plan. Since CMH does not specifically propose residential development and because any future potential residential development would be considered as part of the ultimate buildout under the 2005 General Plan, the CMH Code is consistent with the General Plan and the AQMP population forecasts.

The CMH Code directs redevelopment within the developed urban area of the City. The CMH Code allows for redevelopment of the Hospital campus in close proximity to support commercial uses along Main Street, Loma Vista Road and Telegraph Road, with residential areas that are located about one block to the north and one block to the east. The Project's general characteristics of being a redevelopment project within an urban area and enhancing pedestrian connectivity are consistent with the compact development and smart growth principles that are being encouraged to reduce VMT (Steve Winkelman, Center for Clean Air Policy, July 14, 2009). Reducing the number of vehicle trips is the most significant way of conserving energy and lowering air emissions because large amounts of pollutants are emitted each time a cold engine is started and when the vehicle is turned off. Home to work trips comprise 20% to 30% of all personal vehicle trips, and they are especially significant because they tend to be longer trips, and they also occur during peak times of traffic congestion (VMT Reduction Final Report, available at http://www.ventura.org/rma/planning/pdf/studies/vmt_reduction.pdf).

The CMH Code incorporates Smart Growth principles such as pedestrian orientation, infill development, and mixed use development. Therefore, the CMH Code would not be inconsistent with the AQMP and the impact would not be significant.

Mitigation Measures. The impact would be less than significant; therefore, mitigation is not required.

Significance after Mitigation. Impacts would be less than significant without mitigation.

Impact AQ-2 Construction of individual projects accommodated under the CMH Code, including the new hospital building, would result in emissions of air pollutants. The Ventura County APCD has not adopted significance thresholds for construction impacts because of they are not permanent; therefore, impacts are Class III, less than significant. Nevertheless, standard conditions of approval are required by the City to reduce dust and ozone precursors during construction.

Construction activity that would be facilitated under the CMH Code would cause emissions of various air pollutants. Ozone precursors NO_x and CO would be emitted by the operation of construction equipment, while fugitive dust (PM₁₀) would be emitted by activities that disturb the soil, such as grading and excavation, road construction and building construction. It is estimated that there would be about 23 truck trips/day during demolition and 20 truck trips/day during site grading. As discussed on page 2-25 of Section 2.0, *Project Description*, Phase I development would include construction of the new hospital, street connections and a new 3,900 square foot retail liner building, occurring between 2010 and 2014. Phase II development would include buildout of the remainder of the Hospital District, including construction of about 162,950 square feet of medical office uses and the new 570 space parking garage. Phase II development would occur over a period of years. Construction emissions estimate for Phase I and Phase II development are shown in Table 4.2-4.

The Project would generate up to 53 lbs/day of NO_x and up to 51 lbs/day of PM₁₀ during construction. As discussed under Section 4.2.2, the VCAPCD's 25 pounds per day thresholds for NO_x does not apply to construction emissions since such emissions are not permanent. Therefore, impacts are not considered significant. Nevertheless, the VCAPCD recommends imposition of mitigation if emissions of either pollutant exceed 25 pounds per day. The VCAPCD also recommends minimizing fugitive dust through various dust control measures. In response, the City imposes a standard condition of approval that requires dust and ozone precursor controls.

Table 4.2-4
Maximum Daily Construction Emissions Estimates (lbs/day)

Phase	ROG	NO _x	PM ₁₀	PM _{2.5}
Phase I (2010-2014) 252 Bed Hospital * 3,900 sf retail liner building 121,000 sf of non-essential services ** 104,000 sf of adaptive reuse (new medical office leases) **	13	53	51	12
Phase II (2014-2025) 162,950 sf medical office 570 space parking garage	11	19	43	10

Source: URBEMIS 2007 v 9.2

Modeling results included in Appendix C.

* Modeling accounts for construction of a 252 bed hospital rather than a 10 bed increase since a new building is proposed.

** 121,000 sf of non-essential services and 104,000 sf of adaptive reuse (new medical office leases) not included in modeling because this building is existing.

Grading of areas for future development would be expected to generate emissions of fugitive dust. For redevelopment areas, the demolition of existing older structures that were constructed with asbestos containing materials (ACMs) may occur. Demolition activity that disturbs friable asbestos could potentially create health hazards for receptors in the vicinity of individual demolition sites. However, all demolition activity involving ACMs is required to be conducted in accordance with VCAPCD Rule 62.7, which requires VCAPCD notification and use of licensed asbestos contractors to remove all ACMs prior to demolition. Compliance with Rule 62.7 on all future construction activity would reduce impacts to a less than significant level.

Mitigation Measures. Mitigation is not required because there are no thresholds that have been exceeded; however, the following standard condition of approval will be imposed by the City for Phase I and Phase II development to reduce the Project's contribution of ozone precursors and particulate matter.

AQ-2 Construction Air Quality. The Ventura County Air Quality Assessment Guidelines (October 2003) recommend various techniques to reduce construction-related emissions associated with



individual developments. Individual developers within the Hospital District, including the Hospital, shall include techniques to limit emissions of both ozone precursors (NO_x and ROC), diesel PM and fugitive dust (PM₁₀) in compliance with AQMD Rule 55 and ARB adopted ATCM (13 CCR § 2449.2). At a minimum, these measures shall include, but not be limited to the following as identified below:

- Use Tier 2 or Tier 3 engines
- Contract with an off-road construction equipment provider that has documented compliance with Air Toxics Control Measure (ATCM) PM reduction goals in response to the California Air Resources Board adopted ATCM (13 CCR § 2449.2)
- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
- Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
- Use catalyzed diesel particulate filters and low-sulfur diesel fuel
- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to reduce dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
- Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - a) All trucks shall be required to cover their loads as required by California Vehicle Code §23114.
 - b) All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
- Graded and/or excavated inactive areas of the construction site shall be monitored by the City Building Inspector at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.

- *Signs shall be posted on-site limiting traffic to 15 miles per hour or less.*
- *During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.*
- *Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.*
- *Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.*

Significance after Mitigation. Construction impacts would be less than significant because of they are not permanent. The City imposed standard condition of approval requiring measures that would reduce the generation of diesel PM₁₀ dust and ozone precursors would further reduce construction emissions.

Impact AQ-3 Phase I and Phase II development facilitated by the proposed CMH Code would generate air pollutant emissions. Phase I emissions would not exceed VCAPCD thresholds; however, combined Phase I and Phase II emissions would exceed the VCAPCD thresholds for ROG and NO_x. Increasing energy efficiency and payment of fees pursuant to Ordinance 93-37 would mitigate the impact. This is a Class II, significant but mitigable impact.

As discussed on page 2-23 of Section 2.0 *Project Description*, Phase I development would include the new hospital, street connections and a new 3,900 square foot retail liner building between 2010 and 2014. Phase II development would include buildout of the remainder of the Hospital District, including about 162,950 square feet of medical office uses and the new 570 space parking garage. Phase II development would occur over a period of years. Both phases of development were modeled in the URBEMIS Program (version 9.2.4). Table 4.2-5 shows the modeled daily operational emissions estimates for Phase I and Phase II development.

As indicated in Table 4.2-5, Phase I development of CMH is anticipated to result in about 19 lbs of ROG, and about 20 lbs of NO_x per day. The VCAPCD threshold of 25 lbs/day would not be exceeded under Phase I. Under Phase II, individual projects would be undertaken separately by individual owners/and or developers; however, to show the total emissions estimate for Phase II, the development estimates were modeled together. As indicated, the Phase II development would result in about 20 lbs of ROG/day and 21 lbs of NO_x/day. Therefore, Project emissions would exceed the thresholds by 14 lbs of ROG/day and by 16 lbs of NO_x/day. This is a significant impact.

The new hospital building would include three rooftop cooling towers and two emergency generators. According to the Ventura County APCD, cooling towers are not direct sources of air pollutant emissions as they operate on electricity, rather than, for example, diesel generators. To ensure that all project impacts have been analyzed, the DEIR's analysis of global climate change accounts for the project's secondary emissions associated with the electricity usage pursuant to inpatient health care electricity usage statistics published by the Department of Energy (DOE, 2003). With regard to the emergency generators, this equipment would generate air pollutant emissions, but CMH must obtain Ventura County APCD permits for this equipment that would include specific limitations on emissions. Permits will be required for any new diesel generators, boilers or ethylene oxidize sterilizers. An Authority to Construct (ATC) must be obtained prior to installation. Public notice may be required before issuing the ATC. The APCD recommends that CMH contact the APCD prior to purchasing any equipment requiring a permit.

According to the Ventura County APCD Air Quality Assessment Guidelines, emissions from permitted equipment is not to be counted toward the air quality significance thresholds. This is because stationary equipment is already regulated by Rules and the local permitting process.

**Table 4.2-5
Operational Emissions Estimates (lbs/day)**

Net Increase in Development by Phase	ROG	NOx
Phase I 10 beds 104,000 sf new medical office use 3,900 sf retail	19	20
Phase II 117,444 sf medical campus *	20	21
Total Emissions	39	41
VCAPCD Threshold	25	25
Significant Impact	yes	yes

Source: URBEMIS V.9.2.2, see Appendix C

* Total calculated by subtracting 45,506 sf of existing development to be removed from 162,950 sf of new development.

Notes. Emissions estimates reflect the URBEMIS mitigated totals to account for the developed environment, including: local serving retail, mix of uses (900 jobs and 850 residences within ½ mile radius), 70 buses/day within ¼ mile, bike lanes on 60% of arterials, 100% of streets with sidewalks. These are existing conditions in the Project vicinity.

Mitigated totals also account for the energy efficiency associated with mitigation measure AQ-3(a).

The URBEMIS 2007 v.9.2 program evaluates long-term emissions based on area sources and vehicle emissions. Area source emissions are evaluated based on natural gas consumption, hearth combustion, landscape equipment, consumer products and application of architectural

coatings for maintenance purposes. Area source emissions are typically a much smaller portion of the overall long-term emissions associated with a project, while vehicular emissions tend to comprise the majority of long term emissions. This is because the majority of regulated emissions are generated during combustion and driving automobiles is the greatest source of combustion as compared with the amount of natural gas that is combusted for heating water, cooking on stoves and heating space. The URBEMIS 2007 v. 9.2 program default assumptions are that 25% of workers will commute to the hospital for work, while 75% of trips are Primary (sourced specifically to the hospital), 25% of trips are diverted link trips (associated with another stop) and that there are no pass-by trips (impulse stop). Of the overall emissions generated by Phase I and Phase II of the project, about 95% are from vehicular emissions, while about 5% are from area source emissions (see Appendix C, Operational Emissions output summaries).

The increase in traffic associated with the project would incrementally increase CO concentrations at study area intersections. However, as discussed in Section 4.2, *Traffic and Parking*, levels of service would remain at D or better at all study intersections, even with project and cumulative traffic increases. The Ventura County APCD's Air Quality Assessment Guidelines indicate that CO "hot spot" analysis needs to be conducted only when the level of service would be E or F. In addition, as noted in Table 4.2-2, no violations of state or federal CO standards have occurred in the past three years. Therefore, project traffic would not result in CO concentrations exceeding state or federal standards.

Mitigation Measures. The following mitigation measure would reduce the impact to a level that is less than significant.

- AQ-3(a) Increase Energy Efficiency.** For all new construction, increase energy efficiency by 20% beyond Title 24 requirements.
- AQ-3(b) Air Quality Mitigation Fees.** Phase I and II developers within the Hospital District shall contribute fees to the Citywide Transportation Demand Management Program for respective incremental contributions to air quality emissions in excess of 25 lbs/day threshold prior to occupancy. Fees shall be based and paid in accordance with Ordinance 93-37.

Significance after Mitigation. Impacts would be less than significant after mitigation as implementation of Measure AQ-3(a-b) would offset emissions pursuant to City standard practice. The types of improvements that can be funded using the city's Air Quality Mitigation Fees include the following:

- Express transit services
- Public transit services
- Bus Stop improvements
- Vanpools
- Alternate fuels fleet vehicles
- Bike Trails
- Park-n-ride lots

These improvements are recognized by the regional agencies such as the Ventura County Air Pollution District and the Ventura County Transportation Commission as projects that will contribute to significant improvements in air quality. Refer to the extracts from the 2009 Ventura County Congestion management Program that are included near the end of Appendix C.

The following are some of the projects that have been completed as Capital Improvement Projects using the City's Air Quality Mitigation Fees:

- Bus Transfer Center at Mall - \$121,978.70
- Transit Stop Upgrades - \$50,000
- Bus Shelters - \$50,000
- Highway 126 Bike Path Gap Closure Phase I - \$541,029.62
- Telegraph Road Bike/Sidewalk Upgrade - \$343,480.45

With contribution of funds pursuant to Ordinance 93-37, the project's contribution to cumulative impacts is less than significant due to implementation of improvements such as those already completed under the program.

Impact AQ-4 The health risks associated with onsite grading would not exceed the health risk assessment criteria for sensitive receptors in the vicinity of the Project Area. This is a Class III, less than significant impact.

Diesel particulate emissions would occur primarily during project construction because of heavy-duty vehicle operations and construction equipment during the grading and building phases of project construction. The majority of Project emissions will be associated with the early phase of construction for grading and construction of the hospital pad. Subsequent development of Phase II projects would occur on an intermittent basis as individual projects are undertaken. These projects are anticipated to range from about 12,000 sf to 41,000 sf and individually would result in substantially less diesel exhaust emissions as compared with Phase I, which includes demolition, construction of 3,900 sf of retail and a 252 bed hospital. Thus, the Phase I scenario was evaluated with respect to health risks from diesel PM emissions, since it is the most intensive construction scenario and would occur for a period of about four years.

Based on the URBEMIS 2007 v.9.2.4 output for PM₁₀ diesel exhaust emissions, the SCREEN3 model was run for an area source scenario. SCREEN3 is a screenline model intended to determine under a worst-case basis whether or not emissions have the potential to result in concentrations of concern. Typically, this model will predict concentrations an order of magnitude (10 times) or greater than if a more detailed and complex model were used. This level of accuracy is considered sufficient for the purpose of this CEQA analysis.

The diesel particulate emissions that would be associated with Phase I construction of the Hospital District were quantified based on the sum of the tons/year PM₁₀ diesel exhaust generated during construction for all four years, and then averaged to provide a daily exposure rate. The daily average was reduced by 63% to account for the use of alternative fuels and

retrofitted filters as required under AQ-2, which is a condition of approval for the project. These controls can reduce generation of PM₁₀ by 63-80%; however, to be conservative, a reduction of 63% was applied.

Grading is estimated to cause diesel particulate emissions of 0.0087grams/second within the grading area (see Appendix C for calculations). The SCREEN3 model was then used to determine concentration levels in micrograms/cubic meter [$\mu\text{g}/\text{m}^3$] generated during construction (see Appendix C for model output). The maximum one-hour concentration was calculated at $7.990\mu\text{g}/\text{m}^3$ at a distance of 358 feet. This concentration estimate is conservative, and is not a specific prediction of the actual concentration that would occur at any one point over the course of the construction period. Actual average concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology. The SCREEN3 estimates are intended to be a conservative estimate of the concentration that is unlikely to be exceeded for use in the health risk computation.

The closest receptors are patients and employees of the hospital, located about 70 feet north of the grading area. However, the hospital air is filtered at the intake units and patients are not exposed to diesel particulate emissions. Consequently, the health risk analysis considered those most likely affected by the highest concentrations of pollutants, which would be residences located about 358 feet to the east along Joanne Avenue. A health risk computation was done to determine the potential risk that may result from the maximum one-hour concentration as calculated above and assuming that it would occur at this level for the entire four year period. In addition, the chronic health risk associated with the diesel particulates was estimated based on the reference dose for chronic oral exposure for diesel engine emissions (USEPA, IRIS, 2001). The chronic risk is separate from the carcinogenic risk in that it considers impacts to the respiratory system, such as the buildup of material in the lungs and inflammation of lung tissue. The carcinogenic and non-carcinogenic health risks at the most affected sensitive receptors are shown in Table 4.2-6.

Table 4.2-6
Construction Health Risks

Scenario	Excess Cancer Risk	Chronic Health Risk
Phase 1 Construction		
adult	3.26 E-06	3.80 E-02
child	7.60 E-06	8.87 E-02
<i>Significance Threshold</i>	<i>>1.0E-05</i>	<i>≥1</i>
<i>Exceeds Threshold?</i>	<i>No</i>	<i>No</i>

Scientific notation is sometimes expressed as E (for exponent) as in 1.12E-4 (meaning 1.12 x 10 raised to the negative 4).

As indicated in the table, children are more affected by diesel emissions because of the relatively greater amount of air that they breathe on a daily basis as compared to their body weight. Nonetheless, the health risks associated with onsite grading given the standard measures for construction operations do not exceed the health risk assessment criteria. Impacts

to the most affected sensitive receptors would be less than significant. Likewise, impacts to other sensitive receptors, including residences located about 200 feet to the east and to the southeast of the hospital, as well as students at Saint Bonaventure School, located about 0.15 miles to the east would be less than significant.

Mitigation Measures. Impacts would be less than significant without mitigation, though it is noted that the analysis assumes implementation of standard condition AQ-2, which requires the use of low-sulfur diesel fuel and catalyzed particulate filters.

c. Cumulative Impacts. The Ventura County Air Basin is currently a non-attainment area for both the federal and state standards for ozone and the state standards for PM₁₀. When population growth exceeds the forecasts upon which the AQMP is based, emission inventories could be surpassed, which could affect attainment of standards as a result of past and ongoing urban and rural development that has caused emissions to exceed the air basin's capacity for dispersal and removal of the air pollutants. Buildout under the 2005 General Plan is estimated to accommodate 8,000 dwelling units and five million sf of non-residential development. However, as indicated in AQ-1, the 2005 General Plan development forecasts (2025) do not exceed the AQMP forecasts for the City, and would therefore not result in delayed attainment of air quality standards. Cumulative impacts would therefore be less than significant and the Project's contribution to cumulative air quality impacts would not be cumulatively considerable.

With respect to cumulative construction impacts, there is only one building that is located close enough to contribute to localized adverse air quality conditions, including an increased localization of diesel particulates. This is the Cancer Center, which is located at the southeast corner of Loma Vista Road and Brent Street, about 240 feet from the grading area. The Cancer Center is anticipated for completion later this year and would not occur concurrently with the hospital given the current schedule, which would not allow commencement of construction until 2011. All other pending projects in the vicinity, as mentioned in Table 3-2, are located between 0.5 and one mile from the site. Subsequent Phase II projects would occur independently and are thus not likely to generate substantial amounts of emissions. Thus cumulative construction impacts with respect to air quality would be less than significant.

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4.3 HISTORIC RESOURCES

This section analyzes the impacts of the Community Memorial Hospital District Development Code on historic resources. The Initial Study (Appendix A) determined that the proposed Project would not result in impacts to pre-historic or archaeological resources.

4.3.1 Setting

a. Historic Resources Surveys. This discussion summarizes the findings of a Historic Resources Report conducted by San Buenaventura Research Associates (SBRA) (revised July 15, 2009) and a memorandum by SBRA (July 15, 2009). The SBRA investigation examined potential effects to historical resources from the Project through the use of field investigations and research conducted in March 2009. The full reports are contained in Appendix D. The purpose of the technical report was to identify and evaluate any historic resources that may be affected by development facilitated by the proposed Development Code and to recommend mitigation measures where appropriate. Field investigations, photography, and background research were completed to document existing conditions, identify character-defining features of those properties evaluated as significant, and define the historic resources in the vicinity of the Hospital District. Additional background and site-specific research was conducted in order to evaluate the properties within their historic context. National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR) and City of Ventura criteria was employed to assess the significance of the properties.

The reports were presented to the Historic Preservation Committee (HPC) at their June 2009 meeting. The HPC requested additional information on three properties evaluated in the report: 2815 E. Main Street, 2841 Cabrillo Drive and 145 S. Brent Street. The HPC also requested a Ventura City Landmark eligibility evaluation for properties less than 50 years of age. The reports were revised to provide the requested information, which was derived primarily from planning files and plans located in the Building Department files. On July 27, 2009 the HPC approved the Historic Resources Reports and concluded demolition of the nine Project Area structures would not adversely affect historic resources.

b. Historic Context of the Project Area. The existing Community Memorial Hospital complex is the successor to the E.P. Foster Memorial Hospital building constructed on Loma Vista Road (then, Foothill Road) in 1930-31. The hospital was named after him in 1932 after his death which had originally been planned to be called the Hospital de Buena Ventura.

By the late 1920s and into the 1930s, little development had occurred in Ventura east of Seaward Avenue. The new, three and four-story hospital building was constructed on the eastern fringe of the city, in an area which was predominantly citrus and walnut orchards. The land selected for the hospital was a portion of a speculative subdivision, the Helene Park Tract, on land owned by Milan and Helen Wright. Recorded in 1929, the subdivision divided the triangle of land bounded by E. Main Street, Loma Vista (Foothill) Road and Joanne Avenue into city lots. The Wrights retained a parcel at the intersection of E. Main Street and Foothill Road (now Loma Vista Road), where their home was located.

The hospital purchased a block of undeveloped parcels within the tract along Loma Vista (Foothill) Road for the construction of the hospital building. The remaining parcels of the subdivision began to fill in with small single family residences starting during the mid-1940s. As the hospital began to dominate the area, many residences would be converted to doctor's offices and other medical uses.

The pace of commercial construction on the parcels oriented towards Main Street was set with the opening of the Sears Roebuck building at 2750 E. Main Street in 1948. Nearby commercial parcels along Main Street were developed over the next ten years, particularly as residential development rapidly pressed further east during the 1950s.

A one-story wing was added to the eastern side of the hospital in 1951. In 1962 the hospital's name was changed to Community Memorial Hospital, partly on the recommendation of Orpha Foster. The original hospital building was replaced by the present eight-story building during the early 1970s. With the continued expansion of the hospital, additional residences in the immediate neighborhood were converted to medical offices, or were demolished to make way for medical buildings.

A discussion of the regional historical setting of the City of Ventura can be found in the Historic Resource Report (Appendix D).

c. Criteria for Evaluation of Historic Resources. CEQA requires the evaluation of project impacts on historic resources, including properties "listed in, or determined eligible for listing in, the California Register of Historical Resources [or] included in a local register of historical resources." In analyzing the historic significance of properties located within the study area, various criteria for designation under federal, state, and local landmark programs were considered and applied, as described below. It should be noted, however, that pursuant to CEQA Section 15064.5(a)(4), "[t]he fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources...or identified in an historical resources survey...does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."

Federal Regulatory Setting. The criteria for determining eligibility for listing on the National Register of Historic Places (NRHP) have been developed by the National Park Service. Properties may qualify for NRHP listing if they:

1. *Are associated with events that have made a significant contribution to the broad patterns of our history; or*
2. *Are associated with the lives of persons significant in our past; or*
3. *Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*

4. *Have yielded, or may be likely to yield, information important in prehistory or history.*

According to the NRHP guidelines, the “essential physical features” of a property must be present for it to convey its significance. Further, in order to qualify for the NRHP, a resource must retain its integrity, or “the ability of a property to convey its significance.”

The seven aspects of integrity are:

1. *Location (the place where the historic property was constructed or the place where the historic event occurred)*
2. *Design (the combination of elements that create the form, plan, space, structure, and style of a property)*
3. *Setting (the physical environment of a historic property)*
4. *Materials (the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property)*
5. *Workmanship (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory)*
6. *Feeling (a property’s expression of the aesthetic or historic sense of a particular period of time)*
7. *Association (the direct link between an important historic event or person and a historic property).*

The relevant aspects of integrity depend upon the National Register criteria applied to a property. For example, a property nominated under Criterion A (events), would be likely to convey its significance primarily through integrity of location, setting and association. A property nominated solely under Criterion C (design) would usually rely primarily upon integrity of design, materials and workmanship.

The minimum age criterion for the NRHP is 50 years. Properties less than 50 years old may be eligible for listing on the NRHP if they can be regarded as “exceptional,” as defined by the NRHP procedures.

State of California Regulatory Setting. A resource is eligible for listing on the California Register of Historical Resources (CRHR) if it:

1. *Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;*
2. *Is associated with the lives of persons important in our past;*
3. *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
4. *Has yielded, or may be likely to yield, information important in prehistory or history.*

The California Register procedures include similar language to the NRHP with regard to integrity. The minimum age criterion for the CRHR is 50 years. Properties less than 50 years old may be eligible for listing on the CRHR “if it can be demonstrated that sufficient time has passed to understand its historical importance” (Chapter 11, Title 14, §4842(d)(2)).

By definition, the California Register of Historical Resources also includes all “properties formally determined eligible for, or listed in, the National Register of Historic Places,” and certain specified State Historical Landmarks. The majority of “formal determinations” of NRHP eligibility occur when properties are evaluated by the State Office of Historic Preservation in connection with federal environmental review procedures (Section 106 of the National Historic Preservation Act of 1966). Formal determinations of eligibility also occur when properties are nominated to the NRHP, but are not listed due to owner objection.

Historic resources as defined by CEQA also include properties listed in “local registers” of historic properties. A “local register of historic resources” is broadly defined in §5020.1 (k) of the Public Resources Code, as “a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.” Local registers of historic properties come essentially in two forms: (1) surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current, and (2) landmarks designated under local ordinances or resolutions. These properties are “presumed to be historically or culturally significant... unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.” (Public Resources Code §§ 5024.1, 21804.1, 15064.5).

City of Ventura Criteria. The City of Ventura Municipal Code, Chapter 24.455, *Historic Preservation Regulations*, establishes the procedures for identifying, designating, and preserving historic landmarks or points of interest. Pursuant to §24.455.120.2, a building, structure, archaeological excavation, or object that is unique or significant because of its location, design, setting, materials, workmanship, or aesthetic feeling may qualify as a landmark if it is marked by any of the following:

1. *Events that have made a meaningful contribution to the nation, state, or community*
2. *Lives of persons who made a meaningful contribution to national, state, or local history*
3. *Embodying the distinctive characteristics of a type, period, or method of construction*
4. *Reflecting or exemplifying a particular period of the national, state, or local history*
5. *The work of one or more master builders, designers, artists, or architects whose talents influenced their historical period, or work that otherwise possesses high artistic value*
6. *Representing a significant and distinguishable entity whose components may lack individual distinction*
7. *Yielding or likely to yield, information important to national, state, or local history or prehistory*

Pursuant to §24.455.120.3, any real property or object may qualify as a point of interest if:



1. *It is the site of a building, structure, or object that no longer exists but was associated with historic events, important persons, or embodied a distinctive character of architectural style.*
2. *It has historic significance, but was altered to the extent that the integrity of the original workmanship, materials, or style is substantially compromised.*
3. *It is the site of a historic event which has no distinguishable characteristics other than that a historic event occurred there and the historic significance is sufficient to justify the establishment of a historic landmark.*

Potential landmarks or points of interests are first considered by the City's HPC at a noticed public hearing and with the property owner's permission. The HPC then makes a recommendation to the Planning Commission. After consideration of the HPC's recommendation, the Planning Commission is responsible for making a recommendation to the City Council, which, after consideration at a noticed public hearing, has sole authority to designate landmarks or points of interest. Pursuant to General Plan Action 9.19, any project in a historic district or that would affect any potential historic resource, or structure more than 40 years old is required to perform an assessment of eligibility for the State and Federal registers, landmark status, and appropriate mitigation to protect the resource.

Pursuant to §24.455.510, it is unlawful for a property owner or any other person to carry out, cause, or permit the demolition or relocation of a designated historic landmark. Any such act shall constitute a misdemeanor and:

1. *The owner shall pay to the City the greater of \$10,000.00 or the appraised value of the landmark before demolition occurred minus the appraised value after such action.*
2. *No building permits shall be issued for new development on the property for a period of five years from the date of demolition.*

Exceptions to the rule exist as outlined in §24.455.520, the demolition or relocation of a historic landmark shall not constitute a misdemeanor as prescribed in section 2.430.510 if prior approval of the action was received from the historic preservation committee or, on appeal, from the planning commission or, on appeal from city council.

In addition to the designation of individual historical landmarks and points of interest, the Historic Preservation Committee, Planning Commission, and, ultimately, the City Council may designate certain areas of the City as Historic District (HD) Overlay Zones, pursuant to the City of Ventura Municipal Code, Chapter 23.340 and §24.455.310. The purpose of the HD Overlay Zone is to regulate a landmark, point of interest, or any combination thereof in order to:

1. *Protect against destruction or encroachment upon such areas and structures*
2. *Encourage uses which promote the preservation, maintenance, or improvement of landmarks and points of interest*
3. *Assure that new structures and uses within such areas will be in keeping with the character to be preserved or enhanced*
4. *Promote the educational and economic interests of the entire City*
5. *Prevent creation of environmental influences adverse to such purposes*

The procedure for establishing an HD Overlay Zone is similar to that required for designating a historical landmark or point of interest and includes recommendations by the Historic Preservation Committee and Planning Commission to the City Council for consideration at noticed public hearings. After designation as a historical landmark, point of interest, or Historic District, future development that might have an impact on designated buildings, structures, or areas is subject to design review for compliance with any architectural and development guidelines that the City Council has adopted as a part of the designation process.

The City has adopted the Mills Act, a state law that grants local governments the authority to directly implement a historic preservation program to encourage the preservation and restoration of designated Historic Landmarks. In exchange for property tax relief, property owners agree to maintain and preserve the exterior of their properties according to the Secretary of the Interior's Standards for the Treatment of Historical Properties guidelines.

d. Project Area Cultural Resources. Below is a discussion of the potentially historic properties within the Project Area that would be affected by hospital development as well as subsequent development under the CMH Code.

75 N. Brent Street. This one- and two-story single family residence is characterized by an irregular plan and intersecting low and medium-pitched shed roofs with medium open eaves and exposed rafters. The building is clad in wide horizontal ship-lap siding. Windows are wood frame sash and fixed units. An attached one-car garage is located to the rear (southern elevation). This residence was constructed in 1947 for Merrill E. Russell, a chiropractor, and his wife Irene. During the 1950s it was occupied by Roy Lyall, an electronics technician and his wife Irene, a dental assistant. By the 1970s it was used as a medical office. This modestly Modern Ranch style building appears to be unaltered.

85 N. Brent Street. This one story single family residence features an essentially rectangular plan and a medium-pitched front-facing gable roof with medium lap siding under the gable end. The building is otherwise clad in stucco. The side entry, located on the northern elevation, is situated above a low stoop. Windows are anodized aluminum, apparently new units within the original window openings. This residence was constructed in 1946, apparently for Elmer L. Webb, an oil worker, and his wife Helen. They lived in this residence until at least 1960. This modestly Minimal Traditional style residence appears to be somewhat altered.

95 N. Brent Street. This one story, stucco-clad single family residence features an L-plan and a side-facing medium-pitched gable roof with an intersecting front-facing medium-pitched gable roof with very shallow closed eaves. The entry is inset above a concrete stoop. Windows are wood frame sash, and anodized aluminum evidently replacing sash units within their original openings. This residence was constructed in 1946, apparently for Artie A. Robinson, a service station owner, and his wife Clemma. By the 1950s it was occupied by his station manager, Elmer Smith and his wife Dede. They remained until at least 1960. This very modestly Minimal Traditional style residence appears to be slightly altered.

107 N. Brent Street. This one-story stucco clad single family residence feature an L-plan with intersecting front and side-facing medium-pitched gable roofs with very shallow closed

eaves. The entry is located in the crook of the “L” facing the street intersection, above a low brick stoop. Windows are wood frame sash units. This residence was apparently constructed in 1946 for Roy A. Campbell, an oil worker. He remained until at least 1960. This modestly Minimal Traditional style residence appears to be unaltered.

145 N. Brent Street. This two-story medical office building features a rectangular plan and a flat roof behind a featureless parapet. The main eastern elevation features eight, shallow two-story bays of arched window openings with aluminum window mullions spaced regularly along the facade, with the entry located in the center bay. A similar treatment is seen along the southern elevation. This building, known as the Cabrillo Medical Building, was designed in 1966 and completed in 1967 in a Modern interpretation of the Spanish Revival style. The developer was a partnership known as the Ventura Land and Development Company. The architect for this building was Kenneth H. Hess of Ventura. A number of other architects are referenced on building permits, including Hummel, Rasmussen and Love of Ventura; and S.U.A of Beverly Hills, who were probably responsible for tenant improvements only. According to the original building plans, the lettering “Cabrillo” seen on the upper facade was designed by an Ojai graphic artist named James Kuche. No further information was located on this individual. This building appears to be unaltered.

2825 Cabrillo Drive. This two-story medical office building is rectangular in plan and features a flat roof behind a parapet. The roofline projects beyond the eastern elevation to cover a stairway to the second floor and a second floor balcony, supported by large rectangular columns. An under-building garage entrance is the dominant architectural feature of the southern street elevation. The first story of the building is poured-in place concrete. The second story is vertically board-formed poured-in-place concrete. The date of construction of this building was difficult to determine from the building permits. The most likely year is 1973. This building appears to be unaltered.

2841 Cabrillo Drive. This one-story medical office building is rectangular in plan and features a flat roof. The exterior cladding appears to be a composite wood or plywood material scored to resemble vertical planks. A wide cornice fascia decorated with raised panels runs the entire length of the main southern elevation. Windows are fixed aluminum units surrounded by thin wood casings. The date of construction of this building was difficult to establish from the building permits. It appears to be the combination of three buildings constructed in 1968, 1970 and 1972, altered to its current appearance in 1991. The architect, if any, is unknown.

2856 Cabrillo Drive. This two-story medical office building features an irregular plan and a flat roof. Its dominant architectural features are the angular southern elevation and stairway. The building is clad in narrow vertical wood siding. Windows are fixed, with narrow wood casings. This building was constructed in 1978-79, designed in the Modern style by Rasmussen and Ellinwood architects of Ventura. It appears to be unaltered.

2815 E. Main Street. The southern, street elevation of this two-story commercial building features two bays of unequal size divided by a massive stepped pilaster which projects over the parapet. Identical pilasters define the corners of the main elevation. The lower ground floor facade is characterized by an entry flanked by two, smaller-scale versions of the larger

pilasters, rising to mid-elevation and an anodized aluminum storefront. The upper elevation is characterized by stucco applied in a checkerboard pattern. Windows on the ground and upper facade are fixed, surrounded by wide stucco casings and topped by projecting lintels featuring dentil-like details. The cornice line reflects the design of window lintels. This building was constructed in 1959 as a single story building with rear mezzanine for McMahon Furniture, designed by Ventura architect Kenneth H. Hess.

As nearly as could be determined by the building and planning records, the building's Main Street elevation has been remodeled at least three times. The first alteration appears to have occurred in 1973 when the building was converted to Sawyer Business College, and a bar known as The Dock. This alteration resulted in the removal of most of the building's originally continuous storefront, which consisted of floor-to-ceiling plate glass windows with no bulkheads. The original upper facade, consisting of concrete blocks laid in a checkerboard pattern and a projecting, arched canopy was retained. An internal second story replaced the mezzanine. A proposed second alteration in 1977 was approved, but apparently not implemented. A third alteration permitted in 1986 appears to have resulted in the removal of the original projecting canopy and additional changes to the storefront to accommodate a new bar, known as The Library. The original upper facade was retained. The 1986 plans suggest additional alterations to the storefront occurring between 1973 and 1986, which are not otherwise documented. All photos included in the planning files have been scanned and are illegible.

The building's current appearance evidently resulted from alterations made in 2002, for which no planning records were available, and could be dated from building permits only. However based on a review of previous planning files, this alteration covered the only major remaining feature of the original building which had survived the previous alterations (the upper facade) with the current stucco treatment, and added the second floor windows, cornice line, and projecting pilasters. The current storefront treatment also appears to date almost entirely from the 1992 alterations.

Table 4.3-1 illustrates the potentially historical properties studied in the Historic Resources Report and their eligibility as historic resources. As indicated in Table 4.3-1, none of the properties are eligible as a historic resource. However, one property in the immediate vicinity of the Project Area, the Sears Roebuck building at 2750 E. Main Street, appears to be eligible for designation as a City Landmark for its role in the postwar development of east Ventura and as one of the most prominent examples of late Moderne style of architecture in the City.

The CMH Code would facilitate the addition of a shopfront frontage type to the eastern or southern boundaries of properties along Main Street between 2815 Main Street and Loma Vista Road. The intent of the shopfront frontage type (see Figure 2-6) is to orient these Midtown Code properties such that any boundaries facing open space or streets would be designed with pedestrian orientation. Phase I of the Project would include demolition of nine Project Area structures (45,506 sf of commercial/medical office use and 4 single family residences). One of these structures would be 2815 Main Street, which would be demolished to create a new street.

**Table 4.3-1
Historical Properties**

Address	Building Use	Date	Eligibility
75 N. Brent Street	Single Family Residence	1947	Ineligible
85 N. Brent Street	Single Family Residence	1946	Ineligible
95 N. Brent Street	Single Family Residence	1946	Ineligible
107 N. Brent Street	Single Family Residence	1946	Ineligible
145 N. Brent Street	Medical Office Building	1967	Ineligible
2825 Cabrillo Drive	Medical Office Building	c.1973	Ineligible
2841 Cabrillo Drive	Medical Office Building	1968, 1970, 1972	Ineligible
2856 Cabrillo Drive	Medical Office Building	1978-79	Ineligible
2815 E. Main Street	Commercial Building	1959	Ineligible (altered)

Source: San Buenaventura Research Associates, Historic Resources Report: Community Memorial Hospital Master Plan. Revised July 2009.

Phase II would include buildout of the remainder of the Project Area, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Phase II would not involve demolition of any of the properties listed in Table 4.3-1.

Properties along Main Street would continue to be subject to the Midtown Corridors Code. These properties are required to undergo evaluation at the time development of a property with a structure of more than 40 years in age is proposed pursuant to Municipal Code Section 24M.100.045.M.1.a. The City has existing regulations in place that would require evaluation of any property for which a demolition permit is requested for a structure that is 40 years old at the time of application (Municipal Code Section 2R.450.220).

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds. As previously noted, SBRA performed an historic resources technical report for the proposed project in 2009. The conclusions as to the significance of the effects of the proposed project on historic resources are based on the findings of the Historic Resources report, which is included in Appendix D.

According to PRC §21084.1, “a project that may cause a substantial change in the significance of an historical resource is a project that may have a significant effect on the environment.” By definition, a substantial adverse change means, “demolition, destruction, relocation, or alterations,” such that the significance of an historical resource would be impaired (PRC §5020.1(6)). For purposes of NRHP eligibility, reductions in a resource’s integrity (the ability of the property to convey its significance) should be regarded as potentially adverse impacts.



Further, according to the *CEQA Guidelines*, “an historical resource is materially impaired when a project... [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources [or] that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.”

The lead agency is responsible for the identification of “potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource.” The specified methodology for determining if impacts are mitigated to less than significant levels are the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), publications of the National Park Service. (PRC §15064.5(b)(3-4))

b. Project Impacts and Mitigation Measures.

Impact HR-1 Construction under the CMH Code would involve demolition of nine structures under Phase I, none of which has been identified as eligible for historical listing. One property in the vicinity of the Hospital District is potentially eligible for Landmark status; however, Phase I and Phase II development facilitated by the CMH Code would not significantly affect this property. Therefore, impacts would be Class III, *less than significant*.

As previously indicated, a historic resources evaluation was prepared by San Buenaventura Research Associates (July 2009). The Historic Preservation Committee (HPC) considered the report during meetings on June 29, 2009 and July 27, 2009. At the July 27, 2009 meeting, the HPC concluded that none of the properties that are proposed for demolition are eligible for the National or California Registers or the City of Ventura historic landmark or point of interest. As discussed above, Phase I would include demolition of nine structures. None of these structures is eligible as a potential historic landmark (see Table 4.3-1). Phase II would not include any demolition. Therefore, neither Phase I nor Phase II would result in any direct historic resource impacts.

The project would occur within the setting of one eligible property, the Sears Roebuck building at 2750 E. Main Street (the southwest corner of the intersection of Borchard Drive and Main Street). From 2010 to 2014, Phase I of the Project would be constructed. This construction would result in the removal of the building at 2815 E. Main Street for the construction of an access road. This activity would replace the existing building with a public street along the north side of Main Street, which provides a portion of the setting for the eligible property. However, the building to be demolished is located approximately 300 feet from the eligible

property, and is already substantially altered. Consequently, it contributes only marginally to the setting of the eligible property and its removal would not have a significant or adverse effect on the eligibility of the Sears Roebuck building. The Midtown Corridors Code would be altered to provide frontage standards to parcels along the west side of Main Street that will front a street or an open space area. No other changes to Main Street properties are proposed. Therefore, impacts are less than significant (SBRA, 2009).

Phase II would occur over a period of years and would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, buildings 11, 12, 13, 14, 15, 16 & 17 (as shown on Figure 2-9 and in Table 2-3), and the parking garage would be constructed during Phase II. Phase II development is estimated to be about 162,950 square feet of medical office uses. Phase II development would occur within the interior of the Hospital District, along Loma Vista Road and Brent Street, and would not affect the setting along Main Street. Therefore, Phase II development would not have an adverse impact with respect to the Sears Roebuck Building. Therefore, Phase II development would have a less than significant impact.

The CMH Code also includes a provision that would require applicants for development proposals involving structures over 40 years in age to submit a historic, technical assessment (or "Phase I") prepared by a City-authorized historic professional (CMH Code Section 24SD:H1.100.0051.I.1.a). Subsequent to the review of the Phase I, if the Community Development Director determines a potential Historic Resource is present, but not formally designated as a landmark or already on a State or Federal register, the development proposal shall be reviewed by the Historic Preservation Committee (HPC) for compliance with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties. Therefore, any properties that have not yet been evaluated would be evaluated at the time any proposal is initiated. Impacts to historic resources would not be significant.

Mitigation Measures. Mitigation is not required as the CMH Code would not result in any significant impacts to historic resources.

Significance After Mitigation. Historic resource impacts would be less than significant without mitigation.

c. Cumulative Impacts. Implementation of Phase I and Phase II of the Project, in combination with about 8,000 dwelling units and five million square feet of non-residential development under the 2005 General Plan could alter the historic character of the Hospital District and of Ventura as a whole. Underlying zoning for properties in the vicinity and along the western side of Main Street that are governed by the Midtown Code would allow development of up to six stories which could potentially change the setting in the vicinity of the Sears Roebuck Building. However, pursuant to General Plan Action 9.19 and Municipal Code Section 2R.450.220 and 24M.100.045.M.1.a, any project that affects a building more than 40 years old is subject to evaluation for potential historical resource impacts under CEQA. Therefore, as individual projects under the Midtown Code move ahead, they would be evaluated on an individual basis for the potential to affect historic resources. This would occur not only in the

vicinity of the Sears Roebuck building, but also citywide. Consequently, the potential for adverse cumulative effects would not be significant.

4.4 NOISE

This section addresses construction generated noise, the impacts of noise generated by additional traffic and the placement of development near noise producing sources.

4.4.1 Setting

a. Overview of Sound Measurement. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

The sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than noise that occurs during the daytime. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dB to actual nighttime (10 P.M. to 7 A.M.) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dB penalty for noise occurring during the evening (7 P.M. to 10 P.M.).

b. Sensitive Receptors. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. Sensitive receptors in the Hospital District include patients at Community Memorial Hospital and residences located in the vicinity of the Hospital District, north of Loma Vista Road, about 250 feet to the north, or east of Brent Street, about 200 feet to the east. The closest school to the Hospital District is Saint Bonaventure High School, located at 3167 Telegraph Rd., 0.4 miles from the Hospital District. In addition, the Ventura County Medical Center is located 0.4 miles northeast of the Hospital District. Figure 4.4-1 shows normally acceptable, conditionally acceptable, normally unacceptable, and conditionally unacceptable noise levels for sensitive receptors.

c. Noise Sources. Noise sources often include roadways, construction sites, industrial uses, etc. The primary noise sources in the vicinity of the Hospital District are roadways such as Loma Vista Road, Main Street, and Brent Street. Existing noise levels within the Hospital District were measured with a sound meter on March 5, 2009 and July 27, 2010. Measurements were taken between 12:00 pm and 3:00 P.M. in 20 minute increments. Measured noise levels are identified in Table 4.4-1.

**Table 4.4-1
Existing Noise Levels**

Location	Noise Level (dBA Leq)
Glen Street Parking Lot	57.7
Southeast Corner of Cabrillo Drive and Main Street	67.0
North Brent Street between Cabrillo Drive and Glen Street	55.5
Southwest corner of Loma Vista Road and North Brent Street	64.5
Cabrillo Drive near the closest residential neighborhood	58.6
Telegraph Road in front of Saint Bonaventure School	69.6
Mills between Loma Vista and Telegraph	62.0
Seaward between Main and Thompson	64.7
Main between Seaward and Loma Vista	67.0
Loma Vista between Main and Mills	65.4
Telegraph between Main and Mills	65.9

*Source: Rincon Consultants, 2009 and 2010
One measurement was taken at each location.*



LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE Ldn or CNEL, dBA						
	55	60	65	70	75	80	85
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES							
RESIDENTIAL - MULTI-FAMILY							
TRANSIENT LODGING - MOTELS, HOTELS							
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES							
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES							
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS							
PLAYGROUNDS, NEIGHBORHOOD PARKS							
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES							
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL							
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE							



NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design



CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

Source: Guidelines for the Preparation and Content of Noise Elements of the General Plan, California Office of Planning and Research, 1998.

Land Use/Noise Compatibility Matrix

Figure 4.4-1



d. Regulatory Setting. Guidelines for noise compatible land uses, based upon the City of Ventura General Plan “Our Healthy and Safe Community” Element noise guidelines are shown on Figure 4.4-1. The objective of noise compatibility guidelines is to provide the community with a means of judging the noise environment that it deems to be generally acceptable. The noise matrix is grouped into land uses that rate the “acceptability” of noise for those uses. Denotation of a land use as “clearly acceptable” implies that the highest noise level in that band is the maximum desirable for existing or conventional construction that does not incorporate any special acoustical treatment. In general, evaluation of land use that fall into the “normally acceptable,” “conditionally acceptable,” or “normally unacceptable” noise environments should analyze other potential factors that would affect the noise environment. These include consideration of the type of noise source, the sensitivity of the noise receptor, the noise reduction likely to be provided by structures, and the degree to which the noise source may interfere with speech, sleep, or to other activities characteristic of the land use.

The Ventura Municipal Code noise standards shown in Table 4.4-2 apply to any noise-generating activity that exceeds the applicable level for a cumulative period of more than 30 minutes in any hour at a property line. For noise levels that last less than 30 minutes, the following standards apply: maximum noise levels equal to the value of the noise standard plus 5 dB for a cumulative period of no more than 15 minutes in any hour, 10 dB for a cumulative period of no more than 5 minutes in any hour, 15 dB for a cumulative period of no more than 1 minute in any hour, or 20 dB for any period of time. If the ambient sound level exceeds the allowable exterior standard, the ambient levels become the standard.

Table 4.4-2
City of Ventura Exterior Noise Standards

Time Period	Zone I	Zone II	Zone III	Zone IV
7 A.M. to 10 P.M.	50 dBA	50 dBA	60 dBA	70 dBA
10 P.M. to 7 A.M.	45 dBA	45 dBA	55 dBA	70 dBA

Source: City of Ventura Municipal Code § 10.650.130B.

Designated Zone I: Noise sensitive properties

Designated noise zone II: Residential properties

Designated noise zone III: Commercial properties

Designated noise zone IV: Industrial and agricultural properties

For all multi-family residential units within zones I or II, daytime (7 A.M.-10 P.M.) interior noise levels shall not exceed 45 dBA and nighttime (10 P.M.-7 A.M.) shall not exceed 40 dBA (Section 10.650.130 C.1).

Section 10.650.150 of the Ordinance exempts construction activities from the above standards, provided that they are conducted between 7 A.M. and 8 P.M. Construction activity is permitted between the hours of 8 P.M. and 7 A.M., provided that the noise levels do not exceed the standards specified in Table 4.4-2.

Section 10.650.150. C of the Ordinance states that noise generated by machinery, equipment, pumps, fans, air-conditioning apparatus or tools of any nature or similar mechanical device shall not be operated so as to create any noise which exceeds the noise level limits (see Table 4.4-2). Noise generated during emergency work is exempt from the ordinance pursuant to Section 10.650.170.A of the Municipal Code.

City of Ventura 2005 General Plan. The 2005 General Plan sets the interior noise standard for habitable rooms of new residences at 45 dBA CNEL (Policy 7E, Action 7.32). The exterior level for usable outdoor recreation space (patios, gardens, etc.) of both new single and multi-family residential structures is 65 dBA CNEL (Policy 7E, Action 7.32).

Action 7.32 also requires an acoustical analysis and mitigation prior to development of any residences within the 60 dBA CNEL contour and incorporation of appropriate mitigation to reduce noise in residential exterior usable spaces to 65 dBA CNEL or lower and reduce interior noise levels at residences to 45 dBA CNEL or lower.

4.8.2 Impact Analysis

a. Methodology and Significance Thresholds. The analysis of noise impacts focuses upon the District's impact to surrounding noise-sensitive land uses and the impact of existing noise sources upon the hospital.

Roadway noise impacts were based on projected traffic volumes from the General Plan EIR for the year 2025 plus Project (see Section 4.5, *Traffic and Parking*). Baseline and future (2025) conditions were used in this analysis. To determine roadway-generated impacts, the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM) Version 2.2 was used.

The average daily traffic (ADT) volumes were used for the Hospital District segments and a vehicle use mix was completed based on current conditions and compared to the FHWA 2007 *Annual Average Daily Truck Traffic on the California State Highway System* report (2008) for accuracy. A vehicle mix of 90% automobiles, 8% medium trucks and 2% heavy trucks was used. Next, the ADT was converted to peak hour vehicles by dividing the ADT by 10. This factor was used because peak hour traffic generally represents about 10% of overall ADT.

The analysis also uses noise contour projections developed for the 2005 General Plan EIR. The noise contours represent the maximum possible traffic noise levels at locations within them (i.e., they do not account for building placement or traffic speeds, nor include the attenuating effects of walls, structures, and terrain features that might intervene between the roads and any location of interest). Noise contours were developed for the baseline year (2005) and the future 2025 potential development conditions for the 2005 General Plan FEIR (Figure 4.10-3 and Figure 4.10-4 of the 2005 General Plan), indicating that noise levels in the vicinity of the project area do not change substantially. Noise along Loma Vista Road, Telegraph Road and Main Street is forecast at or above 60 dBA CNEL in 2025. However, noise in the majority of the Hospital District is below 60 dBA CNEL.

For the purpose of this analysis, a significant impact would occur if growth accommodated in the Hospital District would result in any of the following conditions:



- *Exposure of persons to or generation of noise levels in excess of standards established in the 2005 General plan or noise ordinance*
- *Exposure of persons to or generation of excessive ground-borne noise levels*
- *A substantial permanent increase in ambient noise levels above levels existing without the CMH Code*
- *A substantial temporary or periodic increase in ambient noise levels above levels existing without the CMH Code*

For traffic-related noise, impacts are considered significant if traffic-generated noise associated with development accommodated by the CMH Code would result in exposure of sensitive receptors to unacceptable noise levels. The May 2006 Transit Noise and Vibration Impact Assessment created by the Federal Transit Administration (FTA) recommendations were used to determine whether or not increases in roadway noise would be considered significant. The allowable noise exposure increase changes with increasing noise exposure, such that lower ambient noise levels have a higher allowable noise exposure increase.

Table 4.4-3 shows the significance thresholds for increases in traffic related noise levels caused either by the Project alone or by cumulative development.

**Table 4.4-3
Significance of Changes in Operational
Roadway Noise Exposure**

dBA CNEL	
Existing Noise Exposure	Allowable Noise Exposure Increase
45-50	7
50-55	5
55-60	3
60-65	2
65-70	1
75+	0

Source: Federal Transit Administration (FTA), May 2006

Note: CNEL and Ldn are roughly equivalent. FTA uses Ldn; however, CNEL is used for this Project.

If the hospital, residential development or other sensitive receptors would be exposed to traffic noise increases exceeding the above criteria, impacts would be considered significant. Impacts related to onsite activities are considered significant if Project-related activities would create noise exceeding the standards as identified by the applicable noise zone for the Project site.



Periodic noise increases associated with CMH Code implementation would primarily result from future construction activity. Construction noise is considered “substantial” if it would be in conflict with the City Noise Ordinance, which allows noise-generating construction activity between the hours of 7 A.M. and 8 P.M.

b. Impacts and Mitigation Measures.

Impact N-1 Phase I and Phase II growth facilitated by the CMH Code would increase traffic-related noise. Traffic noise increases due to development facilitated by the CMH Code would not exceed FTA standards. Therefore, impacts would be Class III, less than significant.

Development facilitated by the CMH Code would increase traffic-generated noise on roadways in the Hospital District vicinity. Estimated peak hour traffic volumes were used to model the change in noise levels resulting from increased traffic on five roadway segments.

Roadways were chosen based on proximity to the Hospital District and proximity to sensitive receptor populations. Sensitive receptors that may be affected by the increase in roadway noise include residents to the east of the Hospital District; patients at CMH and at Ventura County Medical Center, located 0.22 miles northeast of the Hospital District; and students at Saint Bonaventure School, located 0.15 miles southeast of the Hospital District (all as measured from the closest project site boundary). The following roadway segments were chosen for noise analysis.

- Mills Road between Loma Vista Road and Telegraph Road
- Seaward Avenue between Main Street and Thompson Boulevard
- Main Street between Seaward Avenue and Loma Vista Road
- Loma Vista Road between Main Street and Mills Road
- Telegraph Road between Main Street and Mills Road

As discussed in Section 4.5, *Traffic and Parking*, Phase I development would represent approximately 30% of traffic associated with the Project and Phase II development would represent approximately 70% of traffic associated with the Project. Table 4.4-4 below compares existing (2007) modeled noise levels (2005 General Plan baseline traffic volumes updated with 2007 counts) and existing measured (field measured in 2009 and 2010) on these five roadways near the Hospital District to projected noise levels in 2025 with growth forecast under the CMH Code. This growth includes both Phase I and Phase II. Therefore, approximately 30% of the anticipated change in noise attributed to the Project would be due to Phase I development and 70% of the anticipated change in noise attributed to the Project would be due to Phase II development.

Generally, noise from heavily traveled roadways drops off by about 3 dB for every doubling of distance. Therefore, noise levels at distances greater than 50 feet from the roadway centerlines would be lower than those shown. As discussed above in the *Impact Analysis* section, the allowable increase where ambient noise is 60-65 dBA CNEL would be 2 dB and the allowable increase where ambient noise is 65-70 dBA would be 1 dB. Traffic-generated noise levels affecting each analyzed intersection are discussed below.

**Table 4.4-4
Traffic Generated Noise**

Street Segment	Estimated Noise Level (dBA CNEL)			Change from 2007 Baseline (dB)	Change from 2010 Baseline (dB)	Applicable Threshold (dB)	Significant Impact?
	2007 Modeled Baseline	2010 Measured Baseline	2025 with project				
Mills between Loma Vista and Telegraph	64.0	62.0	63.8	(0.2)	1.8	2	No
Seaward between Main and Thompson	64.6	64.7	65.0	0.4	0.3	2	No
Main between Seaward and Loma Vista	67.1	67.0	67.2	0.1	0.2	1	No
Loma Vista between Main and Mills	65.6	65.4	66.2	0.6	0.8	1	No
Telegraph between Main and Mills	65.5	65.9	66.2	0.7	0.3	1	No

See Appendix E for noise calculation worksheets.

Mills Road between Loma Vista Road and Telegraph Road. Modeled roadway noise associated with cumulative and project traffic would decrease noise on this roadway segment by 0.2dBA. Sensitive receptors along this roadway segment include residences approximately 50 feet from the roadway centerline. Under cumulative plus project conditions, the noise level would be about 64 dBA CNEL at a distance of 50 feet from the roadway centerline. This noise level exceeds the normally allowable noise level for single family units (60 dBA CNEL), but does not exceed the normally allowable noise level for multi-family units (65 dBA CNEL). Since the CMH Code would not measurably contribute to cumulative noise increases, the CMH Code would not significantly affect noise sensitive receptors. The project-related decrease of 0.2 dB from the 2007 modeled baseline and the project-related increase of 1.8 dB from the 2010 measured baseline would be less than the applicable threshold of 2 dB for ambient noise levels between 60 and 65 dBA CNEL. Therefore, project-generated traffic would not significantly affect sensitive receptors along Mills Road.

Seaward Avenue between Main Street and Thompson Boulevard. Modeled roadway noise associated with traffic generated by cumulative development and the project would increase noise on this roadway segment by 0.4 dB. Sensitive receptors along this roadway segment include residences approximately 50 feet from the roadway centerline. Under cumulative plus project conditions, the noise level would be about 65 dBA CNEL at a distance of 50 feet from the roadway centerline. This noise level exceeds the normally acceptable noise level for single family units (60 dBA CNEL) and the normally allowable noise level for multi-family units (65 dBA CNEL). However, the CMH Code-related increase of 0.4 dB from the 2007 modeled baseline and increase of 0.3 dB from the 2010 measured baseline would be less than the applicable threshold of 2 dB where ambient noise levels are between 65 and 70 dBA CNEL.



Therefore, project-generated traffic would not significantly affect sensitive receptors along Seaward Avenue.

Main Street between Seaward Avenue and Loma Vista Road. Modeled roadway noise associated with traffic generated by cumulative development and the project would increase noise on this roadway segment by 0.1 dB. Sensitive receptors along this roadway segment include residences approximately 50 feet from the roadway centerline. Under cumulative plus project conditions, the noise level would be about 67 dBA CNEL at a distance of 50 feet from the roadway centerline. This noise level exceeds the normally allowable noise level for single family units (60 dBA CNEL) and the normally allowable noise level for multi-family units (65 dBA CNEL). However, the CMH Code-related increase of 0.1 dB from the 2007 modeled baseline and the increase of 0.2 dB from the 2010 measured baseline would be less than the applicable threshold of 1 dB where ambient noise levels are between 65 and 70 dBA CNEL. Therefore, project-generated traffic would not significantly affect sensitive receptors along Main Street.

Loma Vista Road between Main Street and Mills Road. Modeled roadway noise associated with traffic generated by cumulative development and the project would increase noise on this roadway segment by 0.6 dB. Sensitive receptors along this roadway segment include Ventura County Medical Center, approximately 50 feet from the roadway centerline. In addition, Loma Vista Elementary School is located about 50 feet north of the centerline; however, there are about 350 feet of athletic fields between the closest building and the traffic on Loma Vista Road. Under cumulative plus project conditions, the noise level would be about 66 dBA CNEL at a distance of 50 feet from the roadway centerline. This noise level exceeds the normally acceptable noise level for hospitals (65 dBA CNEL). However, the CMH Code-related increase of 0.6 dB from the 2007 modeled baseline and increase of 0.8 dB from the 2010 measured baseline would be less than the applicable threshold of 1 dB where ambient noise is between 65 and 70 dBA CNEL. Therefore, project-generated traffic would not significantly affect sensitive receptors along Loma Vista Road.

Telegraph Road between Main Street and Mills Road. Modeled roadway noise associated with traffic generated by cumulative development and the project would increase noise on this roadway segment by 0.7 dB. Sensitive receptors along this roadway segment include residents approximately 50 feet from the roadway centerline and St. Bonaventure High School approximately 50 feet from the roadway centerline. Under cumulative plus project conditions, the noise level would be about 66 dBA CNEL at a distance of 50 feet from the roadway centerline. This noise level exceeds the normally allowable noise level for schools (65 dBA) and the normally allowable noise level for single family housing (60 dBA). However, the CMH Code-related increase of 0.6 dB from the 2007 modeled baseline and increase of 0.3 dB from the 2010 measured baseline would be less than the applicable threshold of 1 dB where ambient noise levels are between 65 and 70 dB. Therefore, project-generated traffic would not significantly affect sensitive receptors along Telegraph Road.

Because noise levels would not exceed the thresholds listed in Table 4.4-3, impacts would not be significant. The proposed hospital would be buffered from noise increases along Loma Vista Road by the existing hospital building. In addition, the proposed hospital would be about 500 feet away from traffic noise generated along Telegraph Road. Moreover, pursuant to General

Plan Figure 7-3, the proposed Hospital does not lie within a contour of ≥ 60 dBA CNEL under 2025 conditions. Therefore, no mitigation is necessary to reduce interior ambient noise levels within the hospital.

Portions of the District are, however, located within the 60 dBA CNEL contour identified in the 2005 General Plan. In addition, based on noise measurements taken in March 2009 (see Table 4.4-1), the noise levels would be above 60 dBA CNEL on the southeast corner of Cabrillo Drive and Main Street, the southwest corner of Loma Vista Road and North Brent Street, and telegraph Road in front of Saint Bonaventure School. Though no residential development is currently proposed, residential uses are permitted as shown in Table 2-2 in Section 2.0, *Project Description*. If in the future any residential development is proposed under the CMH Code along Loma Vista Road or in the southern portion of the Hospital District, mitigation would be required based on 2005 General Plan Action 7.32. Action 7.32 requires acoustical analyses for new residential developments within the mapped 60 dBA CNEL contour and mitigation necessary to ensure that:

- *Exterior noise in exterior spaces of new residences and other noise sensitive uses that are used for recreation (such as patios and gardens) does not exceed 65 dBA CNEL; and*
- *Interior noise in habitable rooms of new residences does not exceed 45 dBA CNEL with all windows closed.*

These levels can be achieved through appropriate building orientation and use of noise attenuating building materials. Therefore, because the 2005 General Plan requires acoustical analysis and mitigation for areas within the 60 dBA CNEL contour, any future residential development would be evaluated at if and when it is proposed. Therefore, the impact is less than significant.

Mitigation Measures. No Mitigation is necessary and the impact is less than significant without mitigation.

Significance After Mitigation. The impact is less than significant with Mitigation.

Impact N-2 Construction of individual projects under Phase I and Phase II of the CMH Code could intermittently generate high noise levels. This may affect sensitive receptors near construction sites. However compliance with Noise Ordinance restrictions on construction timing would reduce this impact to a Class III, less than significant level. Nevertheless, mitigation is recommended to reduce noise generated during construction.

Construction noise from individual projects could affect adjacent noise-sensitive land uses. As required by the City's Noise Ordinance (Sect. 10.650.150) construction noise is limited to between the hours of 7A.M. and 8 P.M. All future development would be subject to the City's Noise Ordinance requirements.

As shown in Table 4.4-5, the noise level associated with heavy equipment typically ranges from about 76 to 101 dBA at 50 feet from the source. Such noise levels can be disturbing, particularly



to noise-sensitive uses such as residences, schools, and hospitals. The grading/excavation phase of construction tends to create the highest construction noise levels because of the operation of heavy equipment. In addition, there would be approximately 23 truck trips per day at the site during demolition and 20 truck trips per day during site grading that would create noise levels during construction of the proposed project.

Table 4.4-5
Typical Noise Levels at Construction Sites

Equipment Onsite	Average Noise Level at 50 Feet
Pile Driver	101 dBA
Air Compressor	81 dBA
Concrete Mixer	85 dBA
Saw	76 dBA
Scraper	89 dBA

Source: Transit Noise and Vibration Impact Assessment, Harris Miller Miller & Hanson Inc., May 2006.

Individual construction projects would be expected to generate noise levels similar to those shown in Table 4.4-5. Such levels would not be permanent, but would exceed ambient noise levels given that ambient noise was measured in the 55 to 70 dBA range. However, it should be noted that Pile Driving is not proposed as a part of this project.

Sensitive receptors in the Hospital District include patients at Community Memorial Hospital and residences located in the vicinity of the Hospital District, north of Loma Vista Road, about 250 feet to the north, or east of Brent Street, about 200 feet to the east. The closest school to the Hospital District is Saint Bonaventure High School, located at 3167 Telegraph Rd., 0.4 miles from the Hospital District. In addition, the Ventura County Medical Center is located 0.4 miles northeast of the Hospital District. Table 4.4-6 shows anticipated noise levels at these sensitive receptor locations during construction.

Table 4.4-6
Anticipated Noise Levels at Sensitive Receptor Locations

Sensitive Receptor	Distance from Plan Area	Anticipated Noise Level
Saint Bonaventure High School	2,112 feet	68.5 dBA
Ventura County Medical Center	2,112 feet	68.5 dBA

Table 4.4-6
Anticipated Noise Levels at Sensitive Receptor Locations

Sensitive Receptor	Distance from Plan Area	Anticipated Noise Level
Residents	200 feet	89 dBA
Community Memorial Hospital	50 feet	89 dBA

Source: Rincon Consultants, Contour Model, 2010.

The City's Noise Ordinance exempts construction activities from the standards shown in Table 4.4-2 in the *Setting*, provided that they are conducted between 7 A.M. and 8 P.M. Assuming compliance with these timing restrictions, noise associated with construction of individual projects would not be significant.

Mitigation Measures. Mitigation is not required. However, because the Hospital District contains an existing hospital that will be occupied throughout construction and because construction will be of a relatively long duration (3-4 years), it is recommended that noise attenuation techniques be practiced throughout construction. The following noise reduction techniques are recommended for consideration.

N-2 Construction Noise. Though no significant construction-related noise impacts are required, the following noise reduction techniques are recommended to further reduce construction generated noise. Prior to issuance of any Grading, Building Permit or start of construction, the Applicant shall provide, to the satisfaction of the City's Building Official, a Noise Mitigation and Monitoring Program. Such plan shall ensure that the proposed project provides the following:

- Construction contracts shall specify that all construction equipment, fixed or mobile, shall to the extent feasible be equipped with mufflers maintained according to manufacturer's specifications and other state required noise attenuation devices.
- Property owners and occupants located within 0.25-mile of the Project construction site shall be sent a notice, at least 15 days prior to commencement of construction, regarding the construction schedule of the proposed Project. A sign, legible at a distance of 50 feet, shall also be posted at the Project construction site. All notices and signs shall be reviewed and approved by the City's Building Official, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide the contact name and a telephone number of the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints.

- The Applicant shall provide, to the satisfaction of the City's Building Official, a qualified "Noise Disturbance Coordinator" who shall be responsible for receiving, registering, and responding to any complaints about construction noise. When a complaint is received, the Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City's Building Official. All notices that are sent to residential units within 0.25-mile of the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Disturbance Coordinator.
- Prior to issuance of a Grading, Building Permit or start of construction, the Applicant shall demonstrate to the satisfaction of the City's Building Official how construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.
- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

Significance after Mitigation. Impacts would be less than significant without mitigation assuming that construction activity occurs between the hours of 7 A.M. and 8 P.M.; however, implementation of additional noise reduction techniques would assist in reducing ambient noise levels for hospital patients, surrounding businesses and residential receptors.

Impact N-3 No residential uses are currently proposed; however, residential uses are an allowable use under the CMH Code. The potential future development of residential uses under Phase II in close proximity to commercial uses and parking structures could potentially expose sensitive receptors to normally unacceptable noise levels. With Mitigation Measure N-3, this is a Class II, *significant but mitigable*, impact.

Phase I of the Project would include the new hospital building (356,000 sf and a net increase of 10 beds) and adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse). In addition, Phase I would include the addition of a 3,900 sf retail liner building (Building 18), which would be constructed adjacent the location of the future new garage and opposite the hospital open space plaza.

Phase II of the Project would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, buildings 11, 12, 13, 14, 15, 16 & 17 (as shown on Figure 2-9 and in Table 2-3 in Section 2.0, *Project Description*), and the parking garage would be



constructed during Phase II. Phase II development is estimated to be about 162,950 square feet of medical office uses. Phase II has the potential to increase noise in the Hospital District due to medical office uses and the proposed parking garage. Noise associated with these uses could include conversations and noises typical of parking garages, including horns honking and car alarms. Noise typically associated with parking lots is shown in Table 4.4-7.

Existing residential neighborhoods are located north of Loma Vista Road, about 250 feet to the north, or east of Brent Street, about 200 feet to the east. In addition, though no residential development is currently proposed as part of the Project, upper story live/work and or multi-family dwellings are allowable uses indicated in Table 2-2 in Section 2.0, *Project Description*. These residential uses, if eventually developed, could be within 50 feet of the parking garage.

Table 4.4-7
Parking Lot Noise Sources at 100 Feet

Source	Level (dBA)
Autos at 14 mph	44
Sweepers	66
Car Alarm Signal	63
Car Alarm Chirp	48
Car Horns	63
Door Slams	58
Talking	30
Radios	58
Tire Squeals	60

Source: Gordon Bricken & Associates, 1996. Estimates based on actual noise measurements taken at various parking lots.

Development of residential uses in the future in close proximity to the helipad and parking garage, as well as other hospital and medical office uses, could expose sensitive receptors to noise in excess of those specified in the City Noise Ordinance (Sec. 10.650.130), as shown in Table 4.4-2, and above 70 dBA CNEL, the normally unacceptable range for residential uses. Action 7.32 of the 2005 General Plan requires an acoustical evaluation and mitigation to ensure that interior habitable spaces are at 45 dBA with the windows closed and that private exterior usable spaces do not exceed 65 dBA CNEL. Action 7.32 applies to the corridor of Loma Vista Road, but does not apply to Brent Street or the interior portion of the Hospital District, where residential development could eventually be developed within liner buildings. Therefore, future noise evaluation is recommended if residential development were proposed in the interior portion of the Hospital District, or along Brent Street.

Mitigation Measures. The following mitigation measure would reduce operational noise impacts to a less than significant level.

N-3 Acoustical Analyses. Acoustical analyses shall be conducted for new residential developments within the Hospital District and shall incorporate mitigation necessary to ensure that:

- *Exterior noise in exterior spaces of new residences and other noise sensitive uses that are used for recreation (such as patios and gardens) does not exceed 65 dBA CNEL; and*
- *Interior noise in habitable rooms of new residences does not exceed 45 dBA CNEL with all windows closed.*

Significance after Mitigation. If residential uses are developed in the future, the potential for exposure to noise in excess of allowable levels would be less than significant with Mitigation Measure N-3, which would ensure that interior and exterior noise levels are within City standards for residential uses.

Impact N-4 **Hospital development would involve the potential for noise generated by stationary equipment such as cooling towers, HVAC systems, emergency generators as well as other types of equipment. Compliance with municipal code requirements would result in a Class III, less than significant impact.**

Phase I of the Project would include the new hospital building (356,000 sf and a net increase of 10 beds) and adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse). In addition, Phase I would include the addition of a 3,900 sf retail liner building (Building 18), which would be constructed adjacent the location of the future new garage and opposite the hospital open space plaza. Construction of the new hospital building would include stationary equipment such as cooling towers and HVAC equipment. As discussed in the regulatory setting section, Section 10.650.150. C of the City's Noise Regulations states that noise generated by machinery, equipment, pumps, fans, air-conditioning apparatus or tools of any nature or similar mechanical device shall not be operated so as to create any noise which exceeds the noise level limits (see Table 4.4-2). The Hospital is considered a noise sensitive use and is located in Noise Zone I, which has an allowable noise level of 50 dBA between 7 A.M. and 10 P.M., and 45 dBA between 10 P.M. and 7 A.M. (see Table 4.4-2). However, the existing ambient noise level exceeds the allowable noise level by up to 14.5 dBA at the southwest corner of Loma Vista Road at North Brent Street. Therefore, pursuant to the municipal code, installation of such equipment will not be allowed to generate noise in excess of the existing ambient noise levels. Common noise attenuation techniques include the use of parapets around rooftop equipment, as well as the use of solid block wall enclosures to reduce noise propagation by stationary equipment such as cooling tower blowers. The use of these types of noise attenuation techniques will facilitate compliance with noise ordinance requirements and the impact would be less than significant without mitigation.

The new hospital building is anticipated to have diesel powered emergency generators that would be operative in the event of a power outage to ensure that critical hospital operations are not interrupted. Emergency generators would be anticipated to be operational only in the event of an emergency or for routine testing to ensure the generators are working properly. Since the generators would not be operational on a regular basis and would only be operational for

routine testing and in the event of an emergency, these operations would not contribute to an exceedance of the allowable noise levels. Moreover, noise generated during emergency work is exempt from the ordinance pursuant to Section 10.650.170.A of the Municipal Code. Therefore, the project would have a less than significant impact with respect to noise from emergency generators.

Mitigation Measures. No mitigation is necessary.

c. Cumulative Impacts. As discussed in Section 3.0, *Environmental Setting*, buildout under the General Plan would add about 8,000 dwelling units and five million square feet of non-residential development. Impact N-1 addresses the cumulative change from existing conditions through 2025 due to projected growth under the 2025 General Plan (including the CMH Code). As such, Impact N-1 addresses cumulative impacts. As noted under Impact N-1, cumulative traffic noise increases along portions of Loma Vista Road and Main Street would potentially exceed adopted thresholds; however, continued implementation of 2005 General Plan actions 7.32 and 7.37, in combination with mitigation measures, would reduce cumulative impacts to a less than significant level.

With respect to cumulative construction impacts, there is only one building that is located close enough to contribute to localized cumulative construction noise. This is the Cancer Center, which is located at the southeast corner of Loma Vista Road and Brent Street, about 240 feet from the grading area. The Cancer Center is anticipated for completion later this year and would not occur concurrently with the hospital given the current schedule, which would not allow commencement of hospital construction until 2011. All other pending projects in the vicinity, as mentioned in Table 3-2, are located between 0.5 and one mile from the site. Subsequent Phase II projects would occur independently and are thus not likely to generate substantial amounts of construction noise. Lastly, as discussed above under Impact N-2, construction noise is limited to between the hours of 7 A.M. and 8 P.M. as required by the City's Noise Ordinance (Sect. 10.650.150). All future development would be subject to the City's Noise Ordinance requirements. Thus, provided that construction activities occur within the 7 A.M. to 8 P.M. time frame, cumulative construction noise impacts would be less than significant.

4.5 TRAFFIC AND PARKING

This section evaluates the impacts of the CMH Code on the local circulation system. The analysis utilizes information from currently available traffic data and the City of Ventura 2005 General Plan FEIR. This document is incorporated by reference and available for review at the City of Ventura Department of Community Development. In addition, the intersection impact analysis is based on a traffic model run conducted by Austin-Foust Associates, Inc. (January 12, 2010), which is contained in Appendix F. The parking supply analysis and parking management plan was developed by City staff (copies of these plans are included in Appendix F).

4.5.1 Setting

a. Existing Street Network. The Hospital District is served by a network of highways, arterial streets and collector streets. The study area intersections are shown on Figure 4.5-1. The following text provides a brief discussion of select major components of the area circulation network.

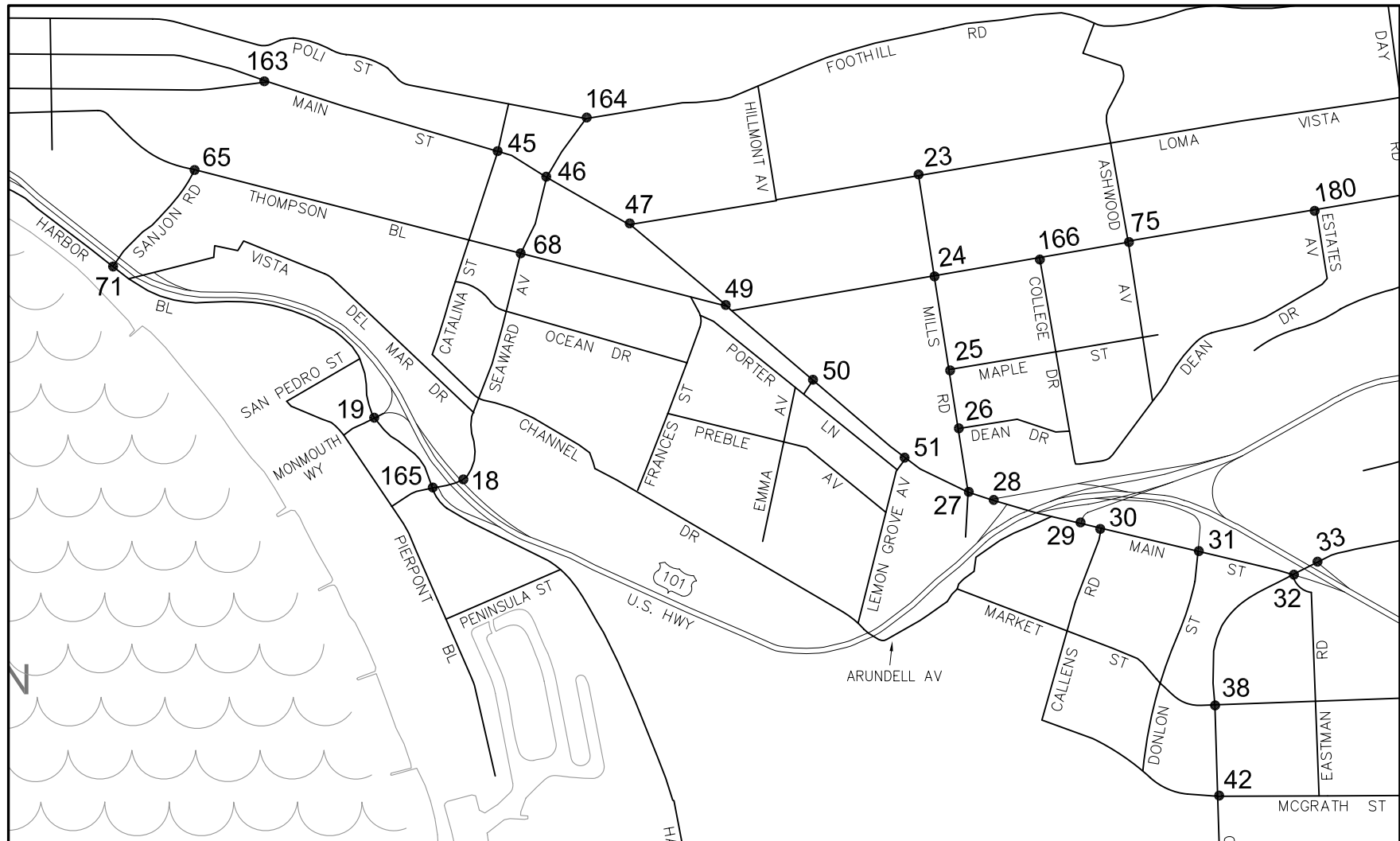
State Route 126. State Route (SR) 126 is a four-lane east-west freeway that extends from U.S. Highway 101 to Santa Paula. East of Santa Paula the freeway becomes a conventional highway, extending to Interstate 5 in Santa Clarita (Los Angeles County). SR 126 provides regional access to the College District and Midtown Area via the SR 126/Main Street interchange. The SR 126/Main Street Eastbound Ramp intersection is controlled by a traffic signal.

U.S. 101. U.S. 101 extends from Ventura County north through Santa Barbara County and south through Los Angeles County. The closest access to the Hospital District from U.S. 101 is via Main Street. Additional access to the Hospital District from U.S. 101 is from Seaward Avenue.

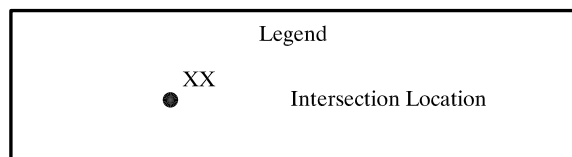
Main Street. Main Street is a primary roadway in the City that connects downtown to midtown. Main Street extends east from Ventura Avenue to Telephone Road. Main Street contains four lanes near the Hospital District. In the Hospital District vicinity, the intersections controlled by traffic signals include the Main Street/Thompson Boulevard, Main Street/Borchard Drive, and Main Street/Loma Vista intersections.

Loma Vista Road. Loma Vista Road forms the Hospital District's northern boundary. Loma Vista Road is a collector adjacent the Hospital District. Loma Vista Road connects Main Street on the west with the Poinsettia Area in the central eastern portion of the City. Loma Vista Road is composed of two traffic lanes near the Hospital District, but widens to four lanes and is classified as a secondary arterial between Mills Road and Day Road. Loma Vista becomes a two-lane collector east of Day Road. The Loma Vista Road/North Brent Street intersection is controlled by a signal near the Hospital District on Loma Vista Road.

Telegraph Road. Telegraph Road is located south of the Hospital District. Telegraph Road is a four-lane secondary arterial that extends between Main Street and Santa Paula on the east. Telegraph Road intersects with Main Street and Thompson Boulevard south of Hospital District at an intersection that is commonly called "Five Points." The Five Points intersection is signalized.



Drawing Source: Austin-Foust Associates, Inc., January 12, 2010



Study Area Intersections

Figure 4.5-1

North Brent Street. North Brent Street is a two-lane local road that extends between Telegraph Road and Foothill Road. North Brent Street is stop controlled at the intersection with Telegraph Road and signalized at the intersection with Loma Vista Road. The North Brent Street segment forms the eastern boundary of the Hospital District.

b. Existing Traffic Volumes and Levels of Service. The relevant setting information with respect to transportation and circulation has not changed substantially since the certification of the 2005 General Plan Final EIR in 2005. Traffic levels in the vicinity of the Hospital District have incrementally increased since the preparation of the 2005 General Plan Final EIR due to regional growth. Intersection monitoring is conducted bi-annually to verify that traffic volumes are accurately characterized within the City's traffic database for select intersections. Accordingly, 2007 data was used as the baseline for analysis.

The study area street network is illustrated on Figure 4.5-1, which shows the intersections analyzed in this EIR. Traffic conditions on the street network are described in terms of traffic volumes on the individual streets and also in terms of intersection operation. The former uses average daily traffic (ADT) as the measure of traffic usage, while the latter examines peak hour volumes to determine how well an intersection performs during rush hours.

Baseline ADT volumes on the arterial street system are shown on Figure 4.5-2. Baseline ADT traffic volumes represent two-direction 24-hour vehicles on an average weekday. Updates to the traffic database since evaluation for the 2005 General Plan indicates that traffic volumes are still within the range allowable for the design criteria of study area roadways (ADT monitoring results are shown in Appendix F). ADT volumes are not used directly in level of service criteria, but serve a number of purposes relative to evaluating the use of the arterial street system. In particular, they provide one of the criteria for determining functional classification.

Level of service (LOS) on the arterial street system is defined according to peak hour intersection performance using ICU values. Table 4.5-1 shows the intersection LOS criteria. Table 4.5-2 lists the ICUs and corresponding LOS values for the study area intersections as updated by the City through a compilation of different data sources. In rating intersection operations, "Levels of Service" (LOS) A through F are used, with LOS A indicating free flow operations and LOS F indicating exceedance of road capacity. As shown in Table 4.5-2, the intersection of Donlon & Main operates with an ICU of .84 at LOS D during the P.M. peak hour and the intersection of US 101 NB Ramps & Main Street has an ICU of 0.90 and an LOS of D during the A.M. peak hour. However, none of the intersections exceed the City's performance criteria of LOS E for freeway ramp intersections and LOS D for all other principal intersections.

The City considers LOS E acceptable at freeway interchange intersections and considers LOS D acceptable at the "principal intersections" within the City. Principal intersections are intersections that are regularly monitored by the City as a gauge of the operation of the City's circulation system. Based on the analysis in the 2005 General Plan FEIR, principal intersections have higher traffic volumes relative to the rest of the network. Principal intersections are shown on Figure 4-5 of the traffic study in Appendix E of the 2005 General Plan Final EIR.



Figure 4.5-2
City of Ventura

Table 4.5-1
Intersection Level of Service Descriptions

LOS	Description	Delay per Vehicle (sec.)	ICU Range
A	LOS A describes operations with low control delay, up to 10 seconds per vehicle. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.	< 10	0.00 – 0.60
B	LOS B describes with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than the LOS A, causing higher levels of delay.	10 - 20	0.61 – 0.70
C	LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	20 - 35	0.71 – 0.80
D	LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35 - 55	0.81 – 0.90
E	LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are common.	55 - 80	0.91 – 1.00
F	LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high V/C ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.	> 80	> 1.00

Source: *Highway Capacity Manual 2000, Transportation Research Board, National Research Council.*



**Table 4.5-2
Baseline ICU Summary**

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	ICU	LOS	ICU	LOS
18. Seaward & US 101 NB Ramps	0.44	A	0.53	A
19. Monmouth/US 101 SB & Harbor	0.44	A	0.62	B
23. Mills & Loma Vista	0.33	A	0.37	A
24. Mills & Telegraph	0.45	A	0.48	A
25. Mills & Maple	0.45	A	0.40	A
26. Mills & Dean	0.51	A	0.53	A
27. Mills & Main	0.59	A	0.61	B
28. US 101 NB Ramps & Main	0.90	D	0.65	B
29. SR 126 EB Ramps & Main	0.35	A	0.48	A
30. Callens & Main	0.39	A	0.68	B
31. Donlon & Main	0.48	A	0.84	D
32. Telephone & Main	0.43	A	0.63	B
33. US 101 NB Ramps & Telephone	0.37	A	0.50	A
38. Telephone & Market	0.25	A	0.51	A
42. Telephone & McGrath	0.24	A	0.45	A
45. Catalina & Main	0.48	A	0.48	A
46. Seaward & Main	0.49	A	0.55	A
47. Main & Loma Vista	0.48	A	0.44	A
49. Main & Telegraph	0.39	A	0.77	C
50. Emma & Main	0.31	A	0.41	A
51. Lemon Grove & Main	0.31	A	0.41	A
65. Sanjon & Thompson	0.35	A	0.40	A
68. Seaward & Thompson	0.50	A	0.50	A
71. Sanjon & Harbor	0.32	A	0.53	A
75. Ashwood & Telegraph	0.38	A	0.44	A
163. Santa Clara & Main	0.49	A	0.46	A
164. Seaward & Poli	0.39	A	0.44	A
165. Seaward & Harbor	0.59	A	0.52	A
166. College & Telegraph	0.33	A	0.38	A
180. Estates & Telegraph	0.29	A	0.37	A

Level of service ranges: .00 - .60 = A

.61 - .70 = B

.71 - .80 = C

.81 - .90 = D

.91 - 1.00 = E

Above 1.00 = F



The Final Environmental Impact Report for the 2005 General Plan provides baseline information with respect to circulation and then focuses on specific aspects of circulation planning such as performance criteria, future traffic demands, long-range highway capacity needs, and issues pertaining to transit and bicycle circulation.

To evaluate the Circulation Element arterial street system in relation to the Land Use Element, use is made of performance criteria. These criteria include “performance standards” and “thresholds of significance,” the latter being used for identifying project impacts in an EIR context. The performance standards represent desired operating conditions for the City’s street system and reflect the goals and policies as contained in the Circulation Element.

The arterial street component of the Circulation Element has two features that define the physical attributes of individual roadways on the citywide street system. These are 1) Design Classification and 2) Functional Classification. The first establishes standards for right-of-way dedication when new construction occurs and shows the maximum number of lanes that would be accommodated on a given street. It essentially sets the maximum size of the street. There are three design classifications used in the Circulation Element, Primary Arterial, Secondary Arterial and Collector. The functional classification addresses lane deployment, medians, parking, and streetscape attributes designed to achieve objectives other than simply moving traffic. It addresses the “character” of a street as well as its size. Labels used in naming the functional classifications include the following:

- *Boulevard – a street with a raised planted median*
- *Arterial – a street with a striped median*
- *Street – a street with no median*

The first two are used in differentiating Primary Arterials, and all three are used for differentiating Secondary Arterials. Other descriptions are used as appropriate, particularly for collectors which are differentiated by both medians and parking.

The design and functional classifications are listed in Table 4.5-3. This shows the relationship between the two in conjunction with specific features of each classification and representative average daily traffic (ADT) values. As noted in the table, the ADT values are representative only and do not imply that the street is capable of carrying this volume or that it should carry no more than this volume. The ADT values listed with the street classifications are simply a guide and do not imply that a roadway needs to be widened simply because the ADT threshold is exceeded. The City of Ventura does not have a defined level of service performance standard for roadways.

The analysis of the arterial road system is based on intersection capacity since this is the defining capacity limitation on an arterial highway system. Levels of service for arterial intersections are determined based on operating conditions during the morning and evening peak hours. The intersection capacity utilization (ICU) methodology is applied using peak hour volumes and the geometric configuration of the intersection. The Arterial Intersection Performance Criteria are shown in Table 4.5-4.

**Table 4.5-3
Street Classifications**

Design Classification	Functional Classification	Lanes	Median	Parking	ADT*
Primary Arterial	Six Lane Boulevard	6	Raised	No parking	54,000
	Six Lane Arterial	6	Striped	No curb parking unless adequate right-of-way (indents preferred)	50,000
Secondary Arterial	Four Lane Boulevard	4	Raised	No parking	36,000
	Four Lane Arterial	4	Striped	If space available (indents preferred)	32,000
	Four Lane Street	4	None	Parking	24,000
	Two Lane Boulevard	2	Raised	No Parking	20,000
Collector	Urban Collector	2	Striped**	Parking	16,000
	Residential Collector	2	None**	Parking	12,000
	Special Collector	2	None	Angle parking	10,000

*The ADT value is a guide to the general level of daily traffic that can be carried by a roadway of this classification. Since level of service is determined by intersection performance rather than roadway link performance, this ADT value will vary (up or down) depending on the performance of adjacent intersections.

**Except where traffic calming applications provide for a raised landscape median

The city monitors and evaluates the performance of the street network at selected locations labeled as principal intersections. The city's performance standard only applies to principal intersections and not to all signalized intersections. In effect, the performance of the City's arterial highway system is evaluated based on the performance of the principal intersections. In other words, principal intersections are the bottlenecks where congestion occurs first and the performance of the arterial highway system is determined and affected by the number of congested principal intersections. This approach is consistent with the goals and policies in the 2005 General Plan that desires a transportation system with the following features:

- *Balanced and with reduced dependence on the automobile;*
- *Safe and easily accessible to all travelers;*
- *Existing roadways are used efficiently to meet mobility needs; and,*
- *Additional travel lanes are considered only when other alternatives are not feasible.*

Table 4.5-4
Arterial Intersection Performance Criteria

V/C Calculation Methodology	
Level of service to be based on peak hour intersection capacity utilization (ICU) values calculated using the following values:	
Saturation Flow Rate:1,600 vehicles/hour/lane	
Clearance Interval: none	
Performance Standard	
Level of Service E (peak hour ICU less than or equal to 1.00) for freeway ramp intersections.	
Level of Service D (peak hour ICU less than or equal to 0.90) for all other Principal intersections*.	
Threshold of Significance (for Impact Analyses)	
For an intersection that is forecast to operate worse than it's performance standard, the impact of a given project is considered to be significant if the project increases the ICU by more than 0.01. An ICU increase of more than .01 does not cause the threshold of significance to be exceeded if the with-project ICU does not exceed the maximum ICU value.	
Level of Service	
Level of Service ranges are as follows:	
ICU	Level of Service (LOS)
0.00-0.60	A
0.61-0.70	B
0.71-0.80	C
0.81-0.90	D
0.91-1.00	E
Above 1.00	F

**Principal Intersections are intersections to be regularly monitored as a gauge of the operation of the City's circulation system.*

This approach also allows a range of improvements, as needed, without building in over-capacity. The range of improvements includes localized improvements at a principal intersection at one end to full improvements to provide additional travel lanes in both directions between two principal intersections. In addition, this approach also implies that other signalized intersections that are not principal intersections are considered to be minor locations that should not experience capacity issues. The need for changes in lane configurations at these minor intersections are identified based on the accident records.

As identified in the 2005 General Plan FEIR, the city monitors and evaluates the performance of the street network at selected locations labeled as principal intersections. The city has a performance standard for signalized intersections that are labeled as principal intersections. The City's performance standard only applies to Principal intersections and not to all signalized intersections, except for those that are located on the CMP network, at which the CMP level of service standard of LOS E is applicable. Other signalized intersections that are not Principal Intersections are considered to be minor locations that are not anticipated to experience capacity issues.

The performance standard for a principal intersection is as follows:

- *Level of service E (peak hour ICU less than or equal to 1.00) at freeway ramp intersections;*
- *Level of service D (peak hour ICU less than or equal to 0.90) for all other principal intersections.*

General Plan Action 4.11 calls for refinement of the level of service standards to encourage use of alternative modes of transportation while meeting state and regional mandates. Level of Service E has been chosen as the minimum system-wide LOS standard in the Ventura County Congestion Management Program (CMP). Therefore, the applicable performance standard for a principal intersection is as follows:

- *Level of service E (peak hour ICU less than or equal to 1.00) at freeway ramp intersections;*
- *Level of service E (peak hour ICU less than or equal to 1.00) on the CMP network; and,*
- *Level of service D (peak hour ICU less than or equal to 0.90) for all other principal intersections.*

The flexibility built into the roadway classifications, the definitions of principal intersections and the applicability of performance standards are consistent with and further the goals and policies in the General Plan that favor mobility and quality of life for the residents of Ventura while sacrificing on the speed of traffic and living with more congestion.

The following are the city's local streets on the Ventura County CMP Network:

- *Harbor Boulevard, Seaward Avenue to Channel Islands Boulevard*
- *Main Street, Thompson Boulevard to Telephone Road*
- *Olivas Park Drive, Harbor Boulevard to Victoria Avenue*
- *Seaward Avenue, Thompson Boulevard to Harbor Boulevard*
- *Telegraph Road, Main Street (Ventura) to Peck Road (Santa Paula)*
- *Telephone Road, Wells Road (SR-118) to Olivas Park Drive*
- *Thompson Boulevard, Seaward Avenue to Main Street*
- *Victoria Avenue, Telegraph Road to Channel Islands Boulevard*
- *Wells Road, Telegraph Road to SR-118*

c. Parking Supply. Parking is currently provided throughout the Hospital District in the form of public surface parking lots, on street parking, and private parking lots for individual developments. A series of parking counts were conducted at the Project site in April and June of 2008, with a follow up count conducted in March of 2009 (Nelson\Nygaard Consulting Associates, November 20, 2009). The peak occupancy period for the studies occurred on June 3rd at 11:00 A.M. The March 4th count was taken from 1:00 to 2:00 P.M. The results are shown in Table 4.5-5.



Table 4.5-5
Summary of Existing Parking and Utilization

<i>June 3, 2008 11 A.M. Parking Count Summary</i>			
Parking Type	Occupied	Vacant	Total Spaces
CMH	807	149	956
Public Lots	397	64	461
On-Street *	139	48	187
Total	1,343	261	1,604
<i>Overall Parking Occupancy Rate 83.7%</i>			
<i>March 4, 2009 1 P.M. Parking Count Summary</i>			
Parking Type	Occupied	Vacant	Total Spaces
CMH	794	155	949
Public Lots	400	61	461
On-Street	139	48	187
Total	1,333	264	1,597
<i>Overall Parking Occupancy Rate 83.5%</i>			

Source: NelsonWygaard Consulting Associates, November 20, 2009

** The counts taken on June 3, 2008 did not include curb parking spaces. Therefore, the curb parking count for this date was assumed to be the same as was observed on March 4, 2009.*

Optimal parking utilization is considered to be 85%, such that parking is well used, but always available. Therefore, under existing conditions, the current parking supply is nearly optimal at 84% utilization during the peak midday hours given the existing uses for the Hospital District and vicinity.

d. Transit. Transit service is provided by Gold Coast Transit (formerly SCAT). Gold Coast Transit provides 23 routes in the County, with Route Six stopping on Loma Vista Road at CMH on both weekdays and weekends. Route Six service is provided between Dakota Drive on Ventura Avenue and the Oxnard Transit Center. Route Six buses run about every 20 minutes Monday through Friday, and run about every 30 minutes on the weekend. Route Six connects with other Gold Coast Transit bus lines at the Ventura Transfer Center, which is located on Telegraph Road, just west of Mills Road. The Ventura Transfer Center is located about $\frac{3}{4}$ mile southeast of the Hospital District. Additional transit service is provided by the Ventura Intercity Service Transit Authority (VISTA), which provides intercity service for the County of Ventura and provide stops at major activity centers throughout the City.

e. Bicycle/Pedestrian Travel. Non-motorized components of the circulation system in the vicinity of the Hospital District include bicycle and pedestrian facilities. Bicycle and pedestrian facilities are discussed below.

Bicycle Facilities. Class III bike lanes are present along Main Street in the vicinity of Hospital District, while Class II bike lanes are present along Telegraph Road and Loma Vista Road. Definitions of Class II and Class III bike lanes follow.

- ***Bike Lane (Class II)*** – *A Class II bikeway is a lane on a road that is reserved for bicycles. The lane is painted with pavement lines and markings and is signed. The lane markings decrease the potential for conflicts between motorists and bicyclists. Bike lanes are one-way, with a lane on each side of the roadway between the travel lane and the edge of paving or, if parking is permitted, between the travel lane and the parking lane. The lanes are at least four feet wide, five feet if parking is permitted.*
- ***Bike Route (Class III)*** – *Class III bike routes share existing roads and provide continuity to other bikeways or designated preferred routes through high traffic areas. There is no separate lane and bike routes are established by placing signs that direct cyclists and warn drivers of the presence of bicyclists. Since bicyclists are permitted on all roads, the decision to sign a road as a bike route is based on factors including the advisability of encouraging bicycle travel on the route, the need to meet bicycle demand, and the desire to connect discontinuous segments of bike lanes.*

Pedestrian Facilities. Sidewalks are present along both sides of all formal street right-of-ways including but not limited to Loma Vista Road, North Brent Street, Telegraph Road, Borchard Drive, and Cabrillo Drive. Pedestrians also utilize the alley behind Main Street and the surface parking lots.

f. Planned Roadway Improvements. There are no planned roadway improvements within the study area that will need to be implemented to maintain acceptable service ratios pursuant to the 2005 General Plan Update analysis.

4.5.2 Impact Analysis

a. Methodology and Significance Thresholds. In August, 2005, the City certified a Final Environmental Impact Report (FEIR) and adopted a comprehensive revision of the General Plan, including the Circulation Element. As part of that effort, 2025 traffic levels were modeled based on projected growth and a program of recommended improvements was devised to achieve and maintain the desired level of service on area roadways and intersections. The traffic analysis prepared for the 2005 General Plan (incorporated herein by reference and available for review at the City Planning Department) was based on growth assumptions for all of the various planning sub-areas of the City, including the Hospital District. However, the CMH Code proposes a specific amount of retail development and medical office development in addition to a 10-bed increase for the hospital that was not specifically evaluated in the General Plan traffic modeling effort. Therefore, these specific development projections were added to the 2005 General Plan Buildout for this area of the City and a traffic model run was conducted to evaluate whether the increase in development potential would generate any additional significant impacts at Study Area intersections. Table 4.5-6 shows the area specific development projections for traffic analysis zone (TAZ) number 179 that were evaluated in the 2005 General Plan and that proposed under the CMH Code.

**Table 4.5-6
Land Use and Trip Generation Comparison
2005 General Plan vs. CMH Code**

Land Use Category	Units	General Plan		General Plan + CMH Code		Difference	
		Amount	ADT	Amount	ADT	Amount	ADT
Single Family Detached	DU	84	804	84	804	0	0
Condos	DU	48	281	48	281	0	0
Apartments	DU	106	703	106	703	0	0
Medium Retail	TSF	134.74	7,133	138.64	7,340	3.90	207
Office	TSF	57.52	633	57.52	633	0	0
Government Office	TSF	203.21	5,080	203.21	5,080	0	0
High School	TSF	600	1,074	600	1,074	0	0
Hospital	Bed	240	2,825	252	2966	12.0	141
Church	TSF	7.48	68	7.48	68	0	0
Medical Office	TSF	--	--	267	9,647	267	9,647
Total	n/a	n/a	18,601	n/a	28,596	n/a	9,995

Source: Austin Foust Associates, Inc. 1/12/2010

Traffic model run assumes an increase of 12 beds.

Notes: DU = Dwelling Units, TSF = thousand square feet, Bed = number of beds in the hospital

A comparison of the growth forecast for the CMH Code with the assumptions used for the 2005 General Plan FEIR traffic model reveals that the CMH Code would accommodate an estimated 3,900 square feet (sf) of retail, about 267,000 square feet of medical office use (adaptive reuse of the existing hospital plus medical office campus buildings in the SD:H1 District), and a 10-bed increase for the hospital. These additional land use development projections were input to the traffic model and applied to the study area street network (see Appendix F for the model run results). The traffic modeling analysis did not include any credits for the removal of the existing medical office uses necessary to build the new hospital building; therefore, the intersection impact analysis is conservative.

The analysis provided in this EIR characterizes traffic levels associated with growth facilitated by the CMH Code within the context of the growth forecasts contained in the 2005 General Plan and focuses on impacts to the local circulation system. Parking supply impact analysis is based on City staff evaluations of the available supply and proposed demand.

Level of service (LOS) on the arterial street system is defined according to peak hour intersection performance using ICU values. Caltrans recommends using the delay based procedures as set out in the Highway Capacity Manual (HCM). However, the City procedures evaluate volumes in relation to capacity (i.e. the V/C ratio) and the ICU methodology is the chosen methodology in the Ventura Congestion Management Program (CMP) for analyzing local streets (see Exhibit 14 from the CMP, which has been included in Appendix F). It is thereby used by the City for traffic impact studies to provide a consistent methodology with that used countywide.



It should be noted that the Caltrans HCM procedure simply reports an average delay and corresponding LOS. Under City criteria, a significant impact based on an incremental V/C increase is well documented and is thereby used in the CEQA process for identifying potential project impacts. Only when deficiencies occur at Caltrans facilities is it necessary to defer to the HCM procedure to determine whether the location would actually be deficient under that methodology. With regards to the freeway interchanges, the analysis examines the two nearest freeway ramps: U.S. 101/Main Street and SR-126/Main Street, and does not find any system deficiencies with or without the project based on City criteria. That is both ramps are forecast to operate at acceptable standards under “future plus project” conditions.

For intersection impact analysis thresholds, level of service E performance standards (peak hour ICU less than or equal to 1.00) are applicable for freeway ramp intersections and non-principal intersections on the Congestion Management Program (CMP) network. Level of service D (peak hour ICU less than or equal to 0.90) is the performance standard for all other principal intersections. For an intersection that is forecast to operate worse than its performance standard, the impact of a project is considered to be significant if the project increases the ICU by more than 0.01. Additionally, impacts relating to transportation and circulation would be considered potentially significant if development facilitated by the CMH Code would:

- *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*
- *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?*
- *Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?*
- *Result in inadequate emergency access?*
- *Result in inadequate parking capacity? (Please note that Appendix G of the CEQA Guidelines was recently revised to exclude parking capacity as a potential environmental impact that should be analyzed by a lead agency)*
- *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?*

b. Project Impacts and Mitigation Measures.

Impact T-1 Phase I and Phase II Project-generated traffic would not cause the LOS at study area intersections to decline below allowable standards. Therefore, traffic impacts would be Class III, less than significant. -Nevertheless, the project would add traffic to the City and County roadway network and developers, including CMH would need to pay applicable traffic impact mitigation fees in accordance with City and County requirements.

As discussed on page 2-23 of Section 2.0 *Project Description*, Phase I development would include the new hospital, street connections and a new 3,900 square foot retail liner building between



2010 and 2014. Phase II development would include buildout of the remainder of the Hospital District, including about 162,950 square feet of medical office uses and the new 570 space parking garage. Phase II development would occur over a period of years. Project-generated traffic expressed as ADT and peak hour volumes is shown in Table 4.5-7.

**Table 4.5-7
Project Trip Generation**

Land Use	Size	Average Daily		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trip Ends	Rate	Trip Ends	Rate	Trip Ends
Phase I							
New Hospital Building	252 Beds	11.77	2,966	1.07	270	1.22	307
Medical Office Reuse in old Hospital	104 TSF	36.13	3,758	2.43	253	3.66	381
Retail	3.9 TSF	52.94	206	1.25	5	4.78	19
Phase I Subtotal			6,930		528		707
Phase I Removals							
Medical Office Buildings	45.5 TSF	36.13	1,644	2.43	111	3.66	167
Existing Hospital Building	242 Beds	11.77	2,848	1.07	259	1.22	295
Single Family Homes	4 DU	9.57	38	0.75	3	1.01	4
Removals Subtotal	n/a	n/a	4,530	n/a	373	n/a	466
Phase I Net Increase			2,400		155		241
Phase II							
New Medical Office Building (Phase II)	163 TSF	36.13	5,889	2.43	396	3.66	597
Phase I + Phase II Total	n/a	n/a	12,819	n/a	924	n/a	1,304
Total Net Increase in Trips							
	n/a	n/a	8,289	n/a	551	n/a	838

Source: City of Ventura, Land Development, January, 2010.

Notes: DU = Dwelling Units, TSF = thousand square feet, Bed = number of beds in the hospital

Project-generated traffic was assigned to the study area network intersections under existing conditions and 2005 General Plan conditions (Year 2025). Table 4.5-8 shows projected levels of traffic at study area intersections under General Plan Buildout Year 2025 conditions. The project's impacts at the study area intersections are captured by the changes in the ICU (intersection capacity utilization) values between the General Plan + Project and the General Plan (No Project) scenarios in Table 4.5-8. The addition of the project's impacts to the existing conditions results in the Existing + Project scenario shown in Table 4.5-9. As is evident from Tables 4.5-8 and 4.5-9, all of the study intersections operate within the city's level of service standards. The Existing + Project conditions shown in Table 4.5-9 is a worst-case scenario as compared to the Existing + Phase I Project. Therefore, the addition of Phase I of the Project in the short term will not have any adverse traffic impacts.

Figure 4.5-3 shows traffic volumes on the study area roadway network. The level of service information presented in Table 4.5-8 and Table 4.5-9 indicates that all of the study intersections are forecast to operate within allowable levels. As previously discussed, level of service E performance standards (peak hour ICU less than or equal to 1.00) are applicable for freeway ramp intersections and non-Principal Intersections on the Congestion Management Program (CMP) network, while level of service D (peak hour ICU less than or equal to 0.90) is the performance standard for all other principal intersections. Therefore, impacts associated with phases I and II of the Project would be less than significant.

The CMH Code would facilitate development that would contribute a net increase of about 8,289 ADT (see Table 4.5-7). Pursuant to City and County policies, applicants for development that would add traffic to the local and regional roadway network are required to contribute traffic impact fees. The project is required to pay applicable City and County traffic impact fees.

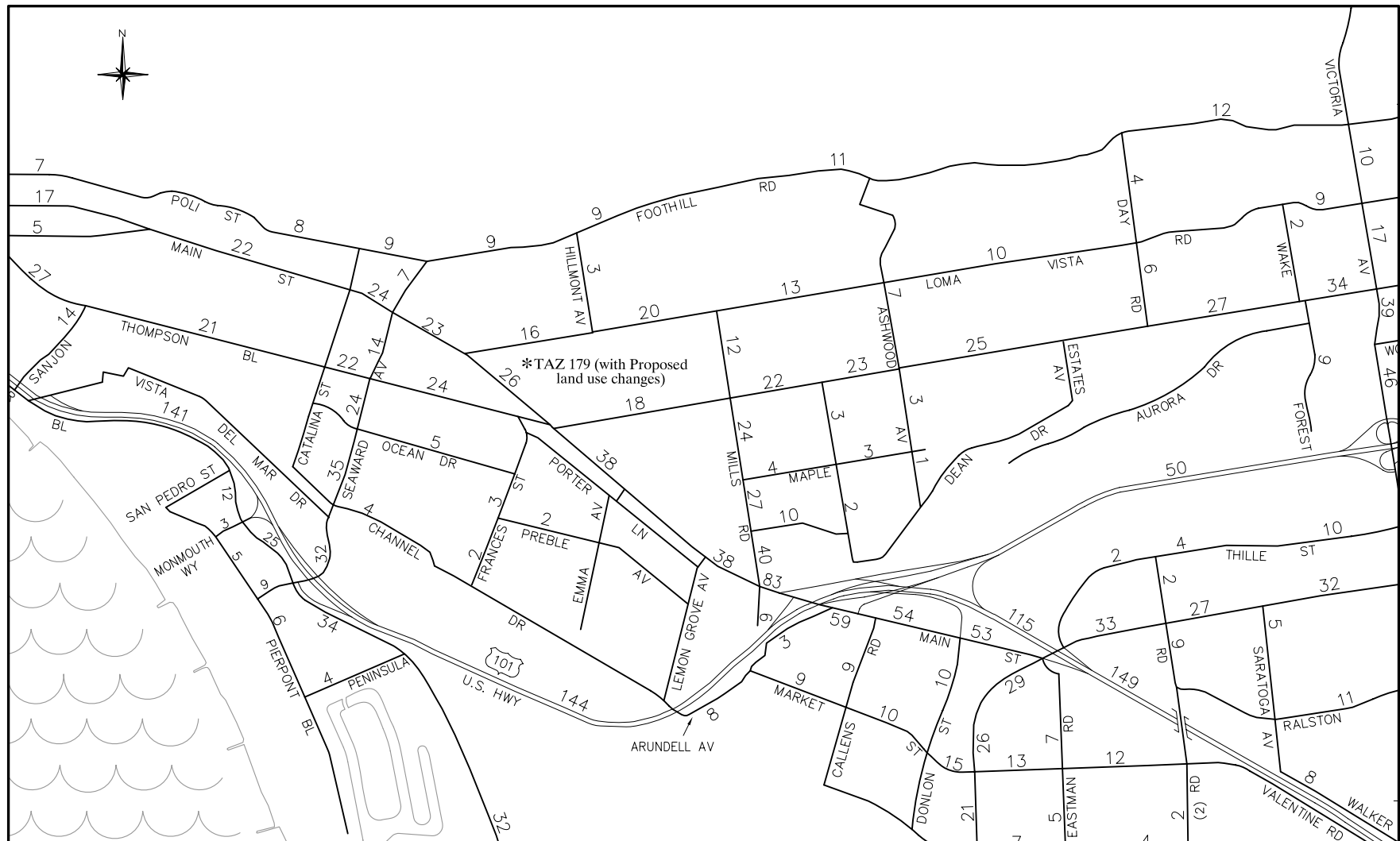
Mitigation Measures. Although significant impacts have not been identified, the following standard condition is required to reduce the Project's contribution to cumulative impacts to the City and County circulation system.

- T-1 Traffic Impact Fees.** CMH and any additional developers within the CMH District shall pay applicable City and County traffic impact fees in accordance with adopted policies for fair share ADT attributed to each development. Payment of fees shall occur prior to issuance of a building permit or prior to occupancy for each developer within the CMH District.

Significance after Mitigation. Impacts would be less than significant without mitigation. Payment of applicable fees would address the Project's contribution to cumulative impacts to the regional transportation system.

The City of Ventura's comprehensive traffic mitigation fee program was implemented in 1988 to mitigate cumulative impacts caused by new development. Prior to the implementation of the impact fee program, development projects were frequently unable to successfully complete the environmental impact review process because the cost of some of the mitigation measures was beyond the financial resources of individual projects to fund necessary improvements such as upgrades to freeway interchanges. The traffic impact fee program provides a way for the City to accumulate funds for large projects in a fair and equitable basis that is directly related to the impacts of new development needed on the City transportation system and to construct the improvements to maintain the quality of life for all City residents. The traffic mitigation fee is based upon the unfunded construction cost of the total circulation system improvements necessary to accommodate peak hour trips anticipated as a result of future growth. Twenty-two projects throughout the City were identified for improvement and are shown in the resolution along with an update on the current status (please refer to Appendix F).

Community Memorial Hospital District Development Code EIR
Section 4.5 Traffic and Parking



Drawing Source: Austin-Foust Associates, Inc., January 12, 2010

Legend

XX With Proposed Land Use Changes

2025 General Plan
 Buildout + Project

Figure 4.5-3

**Table 4.5-8
Intersection ICU and LOS Summary
General Plan Buildout Year 2025**

Intersection	General Plan + Project				General Plan (No Project)				Change in ICU		Impact?
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M.	P.M.	
18. Seaward & US 101 NB Ramps	0.51	A	0.64	B	0.52	A	0.62	B	-0.01	0.02	No
19. Monmouth/US 101 SB & Harbor	0.58	A	0.81	D	0.56	A	0.80	C	0.02	0.01	No
23. Mills & Loma Vista	0.34	A	0.42	A	0.33	A	0.42	A	0.01	0.00	No
24. Mills & Telegraph	0.50	A	0.54	A	0.50	A	0.52	A	0.00	0.02	No
25. Mills & Maple	0.55	A	0.54	A	0.53	A	0.52	A	0.02	0.02	No
26. Mills & Dean	0.56	A	0.57	A	0.54	A	0.53	A	0.02	0.04	No
27. Mills & Main	0.68	B	0.74	C	0.69	B	0.73	C	-0.01	0.01	No
28. US 101 NB Ramps & Main	0.77	C	0.86	D	0.78	C	0.83	D	-0.01	0.03	No
29. SR 126 EB Ramps & Main	0.53	A	0.66	B	0.53	A	0.65	B	0.00	0.01	No
30. Callens & Main	0.46	A	0.69	B	0.46	A	0.68	B	0.00	0.01	No
31. Donlon & Main	0.55	A	0.86	D	0.56	A	0.84	D	-0.01	0.02	No
32. Telephone & Main	0.61	B	0.89	D	0.61	B	0.86	D	0.00	0.03	No
33. US 101 NB Ramps & Telephone	0.56	A	0.67	B	0.56	A	0.67	B	0.00	0.00	No
38. Telephone & Market	0.59	A	0.71	C	0.60	A	0.72	C	-0.01	-0.01	No
42. Telephone & McGrath	0.29	A	0.76	C	0.29	A	0.75	C	0.00	0.01	No
45. Catalina & Main	0.39	A	0.36	A	0.38	A	0.35	A	0.01	0.01	No
46. Seaward & Main	0.55	A	0.73	C	0.53	A	0.69	B	0.02	0.04	No
47. Main & Loma Vista	0.52	A	0.55	A	0.52	A	0.54	A	0.00	0.01	No
49. Main & Telegraph	0.48	A	0.79	C	0.46	A	0.71	C	0.02	0.08	No
50. Emma & Main	0.41	A	0.54	A	0.40	A	0.51	A	0.01	0.03	No



**Table 4.5-8
Intersection ICU and LOS Summary
General Plan Buildout Year 2025**

Intersection	General Plan + Project				General Plan (No Project)				Change in ICU		Impact?
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M.	P.M.	
51. Lemon Grove & Main	0.41	A	0.50	A	0.41	A	0.47	A	0.00	0.03	No
65. Sanjon & Thompson	0.50	A	0.59	A	0.48	A	0.59	A	0.02	0.00	No
68. Seaward & Thompson	0.54	A	0.67	B	0.51	A	0.65	B	0.03	0.02	No
71. Sanjon & Harbor	0.36	A	0.66	B	0.36	A	0.66	B	0.00	0.00	No
75. Ashwood & Telegraph	0.30	A	0.49	A	0.29	A	0.48	A	0.01	0.01	No
163. Santa Clara & Main	0.25	A	0.30	A	0.25	A	0.30	A	0.00	0.00	No
164. Seaward & Poli	0.41	A	0.53	A	0.41	A	0.50	A	0.00	0.03	No
165. Seaward & Harbor	0.59	A	0.72	C	0.58	A	0.70	B	0.01	0.02	No
166. College & Telegraph	0.34	A	0.43	A	0.33	A	0.40	A	0.01	0.03	No
180. Estates & Telegraph	0.30	A	0.41	A	0.25	A	0.39	A	0.05	0.02	No

Notes: Intersections evaluated pursuant to City Threshold Criteria: Allowable LOS at intersections 18,19,28,29, and 33 is LOS E or better, while the allowable LOS at all other intersections is LOS D or better.

Level of service ranges: 0.00 - .60 = A; 0.61- 0.70 = B; 0.71 - 0.80 = C; 0.81 - 0.90 = D; 0.91- 1.00 = E, >1.0 = F

**Table 4.5-9
Intersection ICU and LOS Summary
Existing + Project**

Intersection	Existing Conditions				Project Impacts		Existing + Project				Sig. Impact?
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour		P.M. Peak Hour		
	ICU	LOS	ICU	LOS	ICU	ICU	ICU	LOS	ICU	LOS	
18. Seaward & US 101 NB Ramps	0.44	A	0.53	A	-0.01	0.02	0.43	A	0.55	A	No
19. Monmouth/US 101 SB & Harbor	0.44	A	0.62	B	0.02	0.01	0.46	A	0.63	B	No
23. Mills & Loma Vista	0.33	A	0.37	A	0.01	0.00	0.34	A	0.37	A	No
24. Mills & Telegraph	0.45	A	0.48	A	0.00	0.02	0.45	A	0.50	A	No
25. Mills & Maple	0.45	A	0.40	A	0.02	0.02	0.47	A	0.42	A	No
26. Mills & Dean	0.51	A	0.53	A	0.02	0.04	0.53	A	0.57	A	No
27. Mills & Main	0.59	A	0.61	B	-0.01	0.01	0.58	A	0.62	B	No
28. US 101 NB Ramps & Main	0.90	D	0.65	B	-0.01	0.03	0.89	D	0.68	B	No
29. SR 126 EB Ramps & Main	0.35	A	0.48	A	0.00	0.01	0.35	A	0.49	A	No
30. Callens & Main	0.39	A	0.68	B	0.00	0.01	0.39	A	0.69	B	No
31. Donlon & Main	0.48	A	0.84	D	-0.01	0.02	0.47	A	0.86	D	No
32. Telephone & Main	0.43	A	0.63	B	0.00	0.03	0.43	A	0.66	B	No
33. US 101 NB Ramps & Telephone	0.37	A	0.50	A	0.00	0.00	0.37	A	0.50	A	No
38. Telephone & Market	0.25	A	0.51	A	-0.01	-0.01	0.24	A	0.50	A	No
42. Telephone & McGrath	0.24	A	0.45	A	0.00	0.01	0.24	A	0.46	A	No
45. Catalina & Main	0.48	A	0.48	A	0.01	0.01	0.49	A	0.49	A	No
46. Seaward & Main	0.49	A	0.55	A	0.02	0.04	0.51	A	0.59	A	No
47. Main & Loma Vista	0.48	A	0.44	A	0.00	0.01	0.48	A	0.45	A	No



**Table 4.5-9
Intersection ICU and LOS Summary
Existing + Project**

Intersection	Existing Conditions				Project Impacts		Existing + Project				Sig. Impact?
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour		P.M. Peak Hour		
	ICU	LOS	ICU	LOS	ICU	ICU	ICU	LOS	ICU	LOS	
49. Main & Telegraph	0.39	A	0.77	C	0.02	0.08	0.41	A	0.85	D	No
50. Emma & Main	0.31	A	0.41	A	0.01	0.03	0.32	A	0.44	A	No
51. Lemon Grove & Main	0.31	A	0.41	A	0.00	0.03	0.31	A	0.44	A	No
65. Sanjon & Thompson	0.35	A	0.40	A	0.02	0.00	0.37	A	0.40	A	No
68. Seaward & Thompson	0.50	A	0.50	A	0.03	0.02	0.53	A	0.52	A	No
71. Sanjon & Harbor	0.32	A	0.53	A	0.00	0.00	0.32	A	0.53	A	No
75. Ashwood & Telegraph	0.38	A	0.44	A	0.01	0.01	0.39	A	0.45	A	No
163. Santa Clara & Main	0.49	A	0.46	A	0.00	0.00	0.49	A	0.46	A	No
164. Seaward & Poli	0.39	A	0.44	A	0.00	0.03	0.39	A	0.47	A	No
165. Seaward & Harbor	0.59	A	0.52	A	0.01	0.02	0.60	A	0.54	A	No
166. College & Telegraph	0.33	A	0.38	A	0.01	0.03	0.34	A	0.41	A	No
180. Estates & Telegraph	0.29	A	0.37	A	0.05	0.02	0.34	A	0.39	A	No

Notes: Intersections evaluated pursuant to City Threshold Criteria: Allowable LOS at intersections 18,19,28,29, and 33 is LOS E or better, while the allowable LOS at all other intersections is LOS D or better.

Level of service ranges: 0.00 - .60 = A; 0.61- 0.70 = B; 0.71 - 0.80 = C; 0.81 - 0.90 = D; 0.91- 1.00 = E, >1.0 = F



Impact T-2 **Phase I and Phase II development under the proposed CMH Code would alter the existing street network and circulation system within the Hospital District. The CMH Code would generally improve circulation and would not create hazards due to design features or inadequate emergency access. This is a Class III, less than significant, impact.**

Figures 2-7 and 2-8 in Section 2.0, *Project Description*, show Phase I and Phase II buildout under the CMH Code. As shown, the Hospital District would for the most part maintain existing circulation patterns under Phase I, but would realign Cabrillo Drive and create an additional connection between the new Hospital building entrance and Main Street. Under the CMH Code, Cabrillo Drive would be moved approximately 50 feet to the south at North Brent Street, continuing westward for about 200 feet and then branching to two streets. The north branch would connect with the existing Cabrillo Drive alignment and outlet on Main Street as occurs currently, while the southern branch would outlet on Main Street to create a new pedestrian and vehicular linkage to the hospital district and new open space area.

An overall view of the proposed circulation improvements is shown on Figures 2-7 and 2-8. To accommodate and welcome hospital visitors, diagonal parking and an entry arcade are incorporated into the right-of-way opposite the new hospital entrance. The new southerly aligned Cabrillo Drive becomes a primary entrance to the Hospital District from North Brent Street, and is distinguished by diagonal parking on both sides of the street, as well as tree planters constructed in the unusable area of the diagonal parking stalls to maximize the amount of usable sidewalk space.

Street improvements are discussed in Section 24SD:H1 202.040 of the CMH Code. General improvements include the construction of end-of-block bulbouts at select locations to increase pedestrian comfort in crosswalks and to protect parallel parked vehicles from turning cars. Parking lane tree planters and end-of-block bulbouts are proposed along the east side of North Brent Street. However, the west side of North Brent Street adjacent the Hospital has no bulbouts or in-street planters to maintain a cleared ambulance drop-off /loading zone.

The design philosophy behind the CMH Code street network follows. The CMH Code street network:

1. *Consists of streets that physically and spatially define and frame the blocks;*
2. *Is hierarchical, composing blocks sized for pedestrian use and defined by various street types, whose widths are calibrated for compatibility with the range of building types and uses that each is meant to service. A larger-than-normal block is provided for the hospital itself, due to its size and special programmatic needs for internal connectivity and security;*
3. *Is lean, using the minimum vehicular width practical for each thoroughfare;*
4. *Is interconnected, providing for a variety of alternative paths of movement;*
5. *Is spatially conceived and designed, with carefully calibrated standards for each thoroughfare and for the buildings that front it to establish an appropriate sense of enclosure and to contribute to the character and place within each portion of the Hospital District;*

6. *Is varied, as individual thoroughfares provide for scale, character and intensity transitions between the several blocks within the Plan area; and*
7. *Features strategically located shifts in geometry and physical character, which coincide with the particular role and design speed of the associated streets . This effectively calms traffic without the need for post-construction interventions, and enhances the sense of place through unique positioning of buildings at these transitions.*

For each street type designated in the CMH Code, the corresponding standards on Figure 202.040 (Street Types Plan), prescribe a geometric profile as well as performance characteristics to implement the above characteristics.

Under Phase II development, the Borchard Drive Extension would be completed, and the second parking structure would be developed (see Figure 2-8 in Section 2.0 *Project Description*). These improvements would enhance the overall connectivity and parking availability as the Hospital District builds out. The project would be designed in accordance with applicable standards relative to vehicular access and especially emergency vehicular access, since the project involves the construction of a hospital. No changes would be made to the existing helipad, which is located on the roof of the existing parking garage. The helipad would remain and operate as it does currently. There would be a less than significant impact with respect to creation of hazards due to design features and provision of emergency access.

Mitigation Measures. Mitigation is not necessary as significant impacts have not been identified.

Impact T-3 The Hospital District contains adequate parking for construction of the new hospital and reuse of a portion of the old hospital (part of Phase I); however, additional parking will be required to satisfy demands associated with full buildout of the District (remainder of Phase I and Phase II). Therefore, parking demand could exceed the available supply. This is a Class II, significant but mitigable, impact.

The Parking Management Strategy for the Hospital District incorporates the following components:

- *Establishment of the following parking requirements:*
 - *One parking space per 1,500 square feet of residential land uses in the Hospital District Development Code*
 - *Two spaces per bed for the hospital*
 - *One space per 300 square feet of gross floor area for all other non-residential uses*
- *Amendment of the Municipal Code to allow permit parking in residential neighborhoods surrounding the Hospital District that could be affected by spillover parking demand from the Hospital District*
- *Any loss of District #3 spaces due to Hospital development to be replaced with corresponding increases in the number of public spaces on city-owned property*

- *Implementation of two-hour time restrictions on all public parking within and around the Hospital District including on-street parking spaces as an interim measure*
- *Establishment of a price for leasing of some of the District #3 spaces based on prices similar to the existing parking structure in the Downtown as an interim measure until paid parking is implemented in the Hospital District*

The parking management strategy is designed to ensure that there is adequate public parking available for businesses along the CMH District periphery to the west, and that Hospital District parking demand does not spill over into residential areas to the north and east of the District.

Parking in the Hospital District includes on-street spaces as well as off-street spaces in private and public parking lots. Table 4.5-5 shows there are about 1,600 parking spaces within the Project Area, including City lot spaces and street spaces that are within the zoning boundary of Project Area, but outside of the Hospital District. The public parking lots are on City-owned parcels and are part of Parking District #3. CMH currently has about 950 private parking spaces (see Table 4.5-5), and there are about 650 public spaces. The number of existing off-street spaces on CMH property exceeds the City's requirements for the existing hospital (240 beds x 2 spaces/bed = total hospital demand of 480 parking spaces). However, under Phase I of the Project, a number of private spaces associated with existing satellite medical office uses, in addition to on street spaces and public spaces will become unavailable due to construction staging and the eventual reconfiguration of new buildings, open space and streets (see Figure 4.5-4 for construction staging and figures 2-7 and 2-8 in Section 2.0, *Project Description*, for full Phase I and Phase II development views).

Phase I includes construction of the 252-bed hospital, construction of 3,900 square feet of retail use, adaptive reuse of the existing hospital (104,000 sf of leased medical office space), and modification of street system to realign Cabrillo Drive and create the Hospital Plaza open space area. The realignment of Cabrillo Drive will permanently affect public Parking District #3 lot located within the southern portion of the Hospital District, because the new street configuration will pass through this parking lot. The new alignment has been designed to wrap around the Hospital Open Space area and orient the main hospital entrance towards Main Street, away from the residential areas to the north and east.

The number of District #3 spaces displaced in Phase I is approximately 85 spaces, with 8 spaces in Lot 21, 23 spaces in Lot 20 and 54 spaces in Lot 19 (CMH Hospital District Parking Strategy, Appendix F). The reduction in the number of District #3 spaces will be replaced by increasing the public spaces in the existing parking garage through a corresponding reduction in the number of private CMH spaces. Additionally, the private parking spaces associated with existing buildings that will be demolished will no longer be available once the new hospital is constructed.

Based on the parking demand factors proposed in the CMH Code, the new parking demand for Phase I and Phase II buildout is shown in Table 4.5-10.

**Table 4.5-10
CMH Code Parking Demand**

Use	Parking Demand Rate	Parking Demand
Phase I		
252 Bed Hospital	2 spaces/bed	504
104,000 sf Medical Office Use Old Hospital	1 space/300 sf	347
3,900 sf of retail use	1 space/300 sf	13
Subtotal		864
Phase II		
162,950 sf Medical Office Use	1 space/300 sf	543
Total		1,407

The 950 existing spaces on the CMH property with the construction of Phase I development would exceed the City's requirements of 864 parking spaces. However, this does not account for the private spaces associated with existing medical office uses and public spaces within City-owned lots and on the street that will be lost during construction and redevelopment, nor does this total account for the transfer of private CMH spaces to public spaces or Parking District #3 spaces which are to remain unchanged. Therefore, depending on the number of spaces that will be lost, mitigation is necessary to ensure the parking supply is adequate once the new hospital and retail liner are operational and the old hospital space is leased.

Phase II includes buildout of the remainder of the Hospital District (162,950 sf) including the liner buildings along Loma Vista Road and Brent Street, construction of the second parking garage (570 spaces) and reconstruction of parking spaces adjacent to the existing northern parking garage that will accompany transformation of the second open space area. The parking spaces available in two garages may not be adequate to accommodate the build-out of the CMH Hospital District as proposed depending on the loss of existing spaces and the ability to reduce parking demand through transportation demand management measures. For example, the parking supply indicated in Table 4.5-5 includes a count of all spaces within the district without specifically distinguishing which spaces are privately owned by other medical office uses such as the Cancer Center and independent physician offices (buildings proposed for demolition). In addition, it is not certain how many of the existing spaces would be eliminated upon buildout. As previously discussed, it is estimated that about 85 of the Parking District #3 spaces would be displaced, in addition to those CMH spaces that are currently associated with satellite buildings that will be reabsorbed into the Hospital (buildings proposed for demolition). However, the CMH Hospital District Parking Strategy (see Appendix F) involves actions that would reduce the potential for adverse effects to public and private uses in the vicinity while also addressing the parking demand for development under the CMH Code.

The CMH Hospital District Parking Strategy would prevent spillage of parking demand to the northern neighborhood through issuance of residential parking permits. Secondly, the Parking Management Strategy would require that any Parking District spaces lost to the construction or development footprint be replaced with privately owned CMH spaces in the existing garage. These spaces would then be available to the public. Thirdly, implementation of time restrictions on public parking spaces within the Hospital District would help to ensure that CMH employees are not parking in publicly accessible spaces while they are at work. Lastly, the City would provide an option whereby CMH could lease parking spaces from the City's Parking District, or provide the required parking off-site. Therefore, CMH will not be reliant on on-street parking and will have to lease parking spaces from the City's parking lots (which do have excess capacity) or from privately owned lots.

The parking spaces available in the two garages may not be adequate to accommodate build-out of the CMH Hospital District as proposed depending on the loss of existing spaces and the ability to reduce parking demand through transportation demand management measures. Mitigation is necessary to ensure the parking supply is adequate for buildout.

Mitigation Measures. The following mitigation measure is required to ensure the adequate provision of parking within the Hospital District.

- T-3 Parking Supply.** Reuse of the existing hospital building and new buildings proposed on CMH property and within the CMH District would be subject to compliance with the off-street parking requirements. In order to provide adequate parking for each building pursuant to the Parking Demand Rates of the Community Memorial Hospital District Development Code, parking shall be provided (A) on-site or (B) within 1,250 feet of the hospital if a parking availability study for the building(s) indicates that there will be a sufficient amount of parking spaces. Off-site parking located further than 1,250 feet may be allowed if the following conditions are met: (A) the off-site parking is approved by the Community Development Director; (B) a parking availability study confirms that the off-site parking will provide sufficient parking spaces. On- or off-site (whether within 1,250 feet or not) parking management strategies may include a Transportation Demand Management (TDM) Program. Details of the specifics of the TDM program along with the anticipated reductions in parking shall be reviewed and approved by the Community Development Director.

Significance After Mitigation. Impacts would be less than significant with implementation of mitigation measure T-3.

- Impact T-4 Construction activities have the potential to disrupt travel patterns, reduce available parking, and spill over into public and private areas in the vicinity of the District during both Phase I and Phase II. This is a Class II, *significant but mitigable* impact.**

As discussed in the project description on page 2-25, Phase I would occur from 2010 to 2014 and would include demolition of nine Project Area structures (45,506 sf of commercial/ medical office use and 4 single family residences), construction of the new hospital building (320,000 sf and a net increase of 12 beds), adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse), abandonment of portions of streets, streetscape improvements, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the Hospital District would be consolidated and restriped with the addition of a 3,900 sf retail liner building (Building 18), which would be constructed adjacent the location of the future new garage and opposite the hospital open space plaza. No lane closures would occur on Main Street or Loma Vista Road.

Phase II would occur over a period of years and would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, buildings 11, 12, 13, 14, 15, 16 & 17 (as shown on Figure 2-9 and in Table 2-3), and the parking garage would be constructed during Phase II. Phase II development is estimated to be about 162,950 square feet of medical office uses (see Table 2-3). The City will impose a haul route for construction traffic. The haul route will seek to avoid residential neighborhoods and provide direct access to the freeway.

It is estimated that there would be about 23 truck trips/day during demolition and 20 truck trips/day during site grading. The preliminary Phase I construction staging plans are shown on Figure 4.5-4, and on sheets C-1 and C-2 near the end of Appendix F. Construction activities will occupy much of the southern half of the Hospital District, and vehicular circulation patterns will change for patrons of commercial uses along Main Street adjacent the western boundary of the Hospital District. The preliminary construction staging plan shows public parking and a circulation pattern that will be available during construction. However, because construction activities are anticipated to require about four years for Phase I, and would affect the remaining surface parking supply in the southern portion of the Hospital District during Phase II parking structure construction, mitigation is necessary to ensure ongoing coordination with affected agencies and businesses.

Mitigation Measures. The following mitigation measure would reduce the potential for adverse impacts from construction traffic and parking during construction activities.

T-4 Construction Traffic Impact Mitigation Plan. The applicant shall prepare, implement, and maintain a Construction Impact Mitigation Plan, which shall be designed to:

- *Prevent material traffic impacts on the surrounding roadway network.*
- *Minimize parking impacts both to public parking and access to private parking.*
- *Ensure safety for both those constructing the project and the surrounding community.*
- *Prevent truck traffic through residential neighborhoods.*

The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Public Works



Department, Fire, Planning and Community Development and Police to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to commencement of any construction staging for the project. It shall at a minimum, include the following:

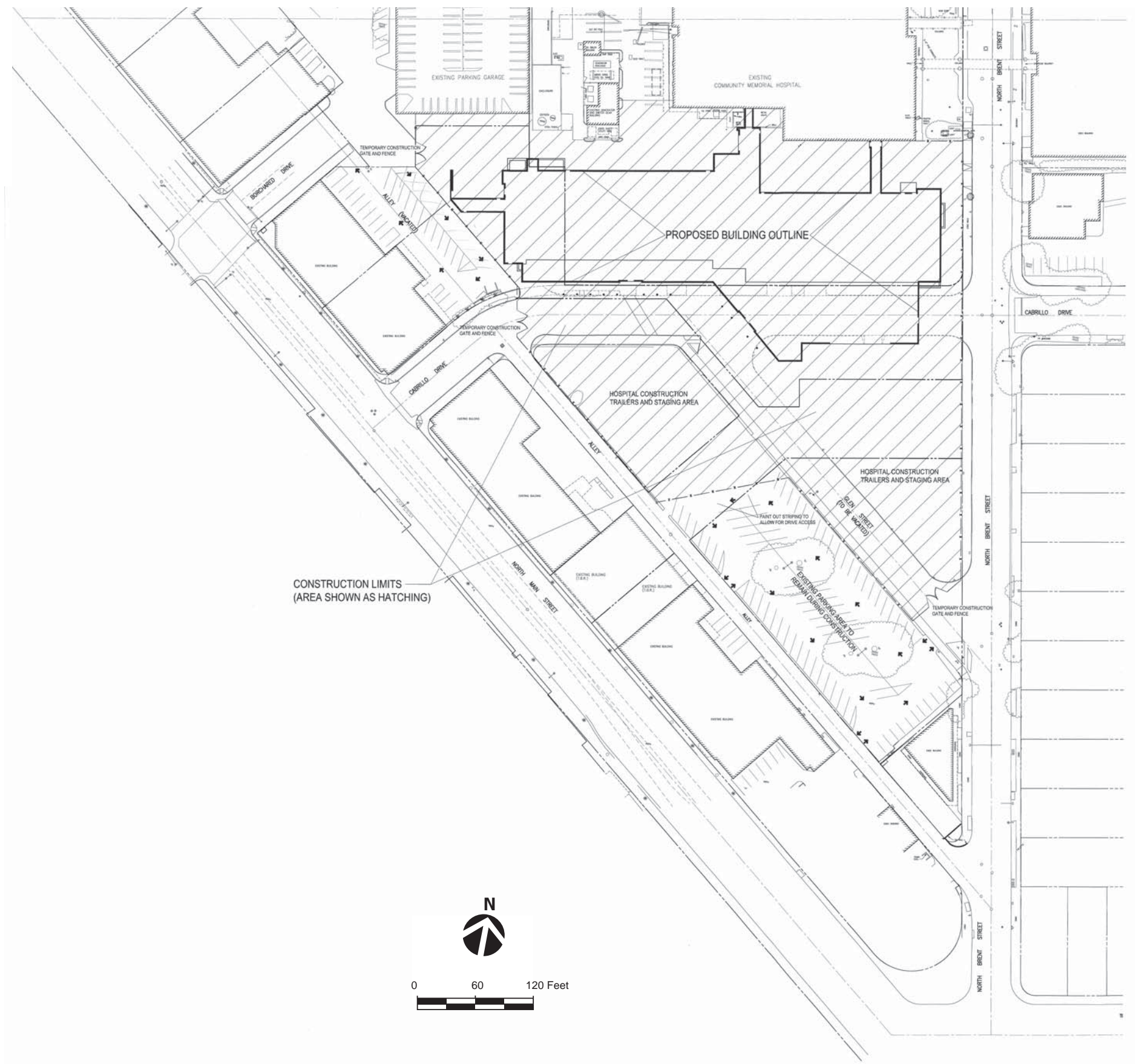
- Ongoing requirements throughout the duration of construction: *A detailed traffic control plan for work zones shall be maintained which includes at a minimum accurate existing and proposed: parking and travel lane configurations; warning, regulatory, guide and directional signage; and area sidewalks, bicycle lanes and parking lanes. The plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans must be reviewed and approved by the Public Works Department prior to commencement of construction and implemented in accordance with this approval.*
- *Work within the public right-of-way shall be performed between 9:00 A.M. and 4:00 P.M., including: dirt and demolition material hauling and construction material delivery.*
- *Trucks shall only travel on a City approved construction route. Truck queuing/staging shall not be allowed on City Streets. Limited queuing may occur on the construction site itself.*
- *Materials and equipment should not be visible to the public; the preferred location for materials is to be on-site, without storage in the public right-of-way.*
- *Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.*

Project Coordination Elements that shall be implemented prior to commencement of construction:

- *Advise the traveling public of impending construction activities (e.g. information signs, portable message signs, media listing/notification, implementation of an approved traffic control plan.*
- *Timely notification of construction schedules to all affected agencies (e.g. Gold Coast Transit, Police Department, Fire Department, Public Works Department, and Planning and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet.*
- *Coordination of construction work with affected agencies in advance of start of work.*
- *Approval by the Public Works Department of any haul routes, for earth, concrete or construction materials and equipment handling.*

Significance After Mitigation. The impact would be less than significant.





Construction Staging Plan

Drawing source: Hospital Designers, Inc., January 2010.

Impact T-5 The CMH Code would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks). The impact would be Class III, less than significant.

The CMH Code would provide guidelines to re-develop the Community Memorial Hospital and to develop a medical office campus surrounding the hospital. Medical uses within the Hospital District would compliment nearby commercial uses along Main Street to the west, as well as residential development to the north of Loma Vista Road and further to the east of North Brent Street. The CMH Code and modifications to the Midtown Code would enhance the pedestrian environment within the Hospital District through the addition of frontage types along the eastern boundaries of Main Street parcels in the Midtown Corridors Code, as well as the introduction of open space areas within the SD:H1 District and the Midtown Corridors Code. Additional pedestrian amenities include a retail liner building opposite the Hospital Plaza open space area to block views of the parking lot, the addition of a 6- to 10-foot wide sidewalk along portions of the alley that lie behind the Main Street buildings, and mostly 12-foot wide sidewalks throughout the remainder of the Hospital District. Other public realm improvements include a street tree planting plan that assigns specific varieties of trees to specific roadways. Varieties under consideration include red-flowering gum trees, gold medallion trees, Mexican fan palms, Chinese flame trees, rainbow eucalyptus, and New Zealand Christmas trees.

Table 4.5-11 evaluates the project's consistency with applicable Policies and Actions adopted under the 2005 General Plan to support alternative modes of transportation.

**Table 4.5-11
Alternative Transportation Policy Consistency**

Policy/Action	Consistency Discussion
Action 4.6 Require new development to be designed with interconnected transportation modes and routes.	Consistent. The Project would create a network of connected internal streets and would be located along Gold Coast Transit Route 6. The project includes streetscape enhancements and would preserve the existing bike lanes along Loma Vista Road as described in the streetscape section of the CMH Code. The project appears consistent with this directive.
Action 4.12 Design roadway improvements and facility modifications to minimize the potential for conflict between pedestrians, bicycles, and automobiles.	Consistent. As discussed under Impact T-2, the project would create a pedestrian friendly environment by creating a network of sidewalks, open spaces, and streetscape enhancements such as bulbouts to minimize pedestrian and vehicular conflicts. The project appears consistent with this directive.
Policy 4B Help reduce dependence on the automobile.	Consistent. The project would improve pedestrian connections. In addition, as the hospital district builds out, implementation of a TDM plan would further reduce automobile use by hospital employees would reduce dependence on the automobile. The project appears consistent with this directive.
Action 4.21 Require new development to provide pedestrian and bicycle access and	Consistent. The project would replace existing bicycle striping along Loma Vista Road as part of the streetscape

**Table 4.5-11
Alternative Transportation Policy Consistency**

Policy/Action	Consistency Discussion
facilities as appropriate, including connected paths along the shoreline and watercourses.	improvements prescribed under the CMH Code, and would improve pedestrian connections within the Hospital District. The project appears consistent with this directive.
Action 4.23 Upgrade and add bicycle lanes when conducting roadway maintenance as feasible.	Consistent. The project would replace existing striping along Loma Vista Road as part of the streetscape improvements prescribed under the CMH Code. The project appears consistent with this directive.
Action 4.24 Require sidewalks wide enough to encourage walking that include ramps and other features needed to ensure access for mobility-impaired persons.	Consistent. The CMH Code would specify mostly 12' wide sidewalks and all intersections would be ADA compliant. The project appears consistent with this directive.
Action 4.29 Develop incentives to encourage City employees and local employers to use transit, rideshare, walk, or bike.	Consistent. As the hospital district builds out, implementation of a TDM plan to further reduce automobile use by hospital employees would reduce dependence on the automobile. The project appears consistent with this directive.

The proposed project would be consistent with adopted policies and actions in support of alternative transportation; therefore, the impact is less than significant.

Mitigation Measures. Mitigation is not necessary as significant impacts have not been identified.

Significance After Mitigation. The impact would be less than significant without mitigation.

c. Cumulative Impacts. Cumulative traffic impacts are discussed under Impact T-1, which evaluates the 2025 future year conditions. As indicated in that discussion, cumulative impacts would be less than significant. Cumulative impacts related to design hazards would be reduced through adherence to adopted design standards within the Midtown Code, the CMH code as well as within applicable portions of the City's Municipal Code. Cumulative impacts related to parking could include reduced parking space availability for businesses within the adjacent Midtown Code between Main Street and Telegraph Road as well as parking spillover into residential neighborhoods to the north of Loma Vista Road. The potential for adverse effects related to spillover parking and reduced public supply would be reduced through implementation of the Parking Management Strategy described on page 4.5-23, which will facilitate permit parking in residential neighborhoods surrounding the Hospital District and which would implement two-hour restrictions on public parking in the Hospital District. Time restrictions in association with monitoring to maintain 85% utilization is anticipated to result in a supply that is well used, but always available, similar to the strategy for Downtown. Cumulative impacts related to conflicts with adopted policies in support of alternative transportation would be reduced through adherence Code requirements in addition to review of new developments for consistency with applicable requirements. Cumulative impacts related to transportation would not be significant.

4.6 HYDROLOGY AND WATER QUALITY

This section addresses impacts to local and regional hydrology, as well as short and long-term impacts to surface water quality. This section is based in part on a Preliminary Hydrology and Hydraulic Report produced by Jensen Design & Survey, Inc. (November 9, 2009). The report is included as Appendix H.

4.6.1 Setting

a. Hydrology. The City of Ventura is located within the western portion of the Santa Clara River Basin. The City's general drainage pattern begins in the hills above of the City and terminates at the Ventura River, the Santa Clara River or the Pacific Ocean. Within the Project Area, water is transported overland via sheet flow, which is directed to a system of catch basins and storm drains along Loma Vista and Brent Street. The Project Area lies within four watersheds (see Figure 4.6-1). Watershed areas and peak runoff volumes under existing conditions for different storm events are shown in Table 4.6-1.

Table 4.6-1
Existing Watersheds and Peak Runoff Volumes

Watershed Name	Area (acres)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	21.2	37.3	53.7	65.4
A1	3.0	5.3	7.6	9.3
B	23.1	40.5	58.3	71.0
C	7.3	12.9	18.5	22.6
Total	54.6	95.9	138.1	168.2

Source: Figure 4.6-1. Jensen Design & Survey, Inc.

Notes: cfs= cubic feet per second, totals may not add due to rounding.

The Project Area is about 85% impervious and is developed with surface parking and buildings. Peak runoff volumes for the 10 year, 50 year and 100 year storm are shown above for the existing condition. A Q10 storm has the probability of occurring once every 10 years, while a Q50 has a probability of occurring once every 50 years and a Q100 has the probability of occurring once every 100 years. In actuality, these storms may occur more or less frequently, but the volumes associated with the return period events are static volumes based on the watershed size, soil characteristics and the rainfall intensity.

b. Drainage. Under the existing condition, runoff is directed towards an existing 24" storm drain line located along the alley and a system of catch basins located along Brent Street, near Telegraph Road. As mentioned above, the site is contained in four watersheds (see Figure 4.6-1).

Watershed A. Runoff from the northerly part of Watershed A sheet flows towards a series of catch basins located along Loma Vista Road. Runoff collected by these catch basins is released into North Brent Street and is allowed to sheet flow southerly towards two catch basins

located at the southerly end of North Brent Street. The remaining runoff from drainage Area A sheet flows directly into North Brent Street and eventually enters the same two catch basins described above. This runoff is then directed to a 36" storm drain line located in North Brent Street, ultimately connecting to a 48" storm drain line located in Main Street.

Watershed A1. Runoff from Watershed A1 is primarily sheet flow and is directed towards North Brent Street, where it mixes with runoff collected from Watershed A. This runoff eventually enters the catch basins on North Brent Street.

Watershed B. Runoff from Watershed B is composed of sheet flow from northerly areas that is collected in storm drain inlets along Loma Vista Road that connect directly to a 24" storm drain line located in the existing alley. Within the Project Area, the remaining runoff is directed to on-site drain inlets which connect directly to the same 24" storm drain line in the existing alley. This 24" storm drain line connects to the existing 36" storm drain line in North Brent Street.

Watershed C. Runoff from Watershed C sheet flows towards North Brent Street, where it enters an existing catch basin. The catch basin connects to the existing 36" storm drain line in North Brent Street.

c. Surface Water Quality. The primary sources of pollution to surface water resources include stormwater runoff from paved areas, which can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals, and coliform bacteria. Seepage from sewage treatment lagoons can further contribute to degraded water quality in the form of elevated nitrate levels. Improperly placed septic tank leach fields can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides, and other harmful chemicals. Agricultural and industrial operations typically use substances that can affect surface water quality.

d. Regulatory Framework. Development in the Project Area is subject to various local, state, and federal regulations and permits regarding the use of water resources. The Ventura County Watershed Protection District, the California Department of Water Resources, and the Los Angeles Regional Water Quality Control Board are the primary agencies responsible for the protection of watersheds, floodplains, and water quality. The Ventura County Department of Health is the primary agency responsible for establishing design standards and permitting of septic tanks and wells. The federal government administers the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates discharges into surface waters. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill materials into Waters of the United States or adjacent wetlands without a permit from the U.S. Army Corps of Engineers.

The primary regulatory control relevant to the protection of water quality is the Federal National Pollution Discharge Elimination System (NPDES) permit administered by the State Water Resources Control Board. This board establishes requirements prescribing the quality of point sources of discharge and establishes water quality objectives. These objectives are established based on the designated beneficial uses (e.g., water supply, recreation, and habitat) for a particular surface water or groundwater. The NPDES permits are issued to point source



Drawing source: Jensen Design & Survey, Inc., April 29, 2009.

Existing Conditions

Figure 4.6-1
City of Ventura

dischargers of pollutants to surface waters and are issued pursuant to Water Code Chapter 5.5 that implements the Federal Clean Water Act. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control Board, Title 23, Chapter 9, Section 2200). Discharge limits, under the NPDES permits, for minerals and pollutants are established and regulated by the California Regional Water Quality Control Board.

Locally, the Ventura County Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) is included as an attachment to the NPDES permit. The SQUIMP is an implementation document that resulted from the Ventura County Stormwater Quality Management Program, which was formed to enhance, protect and preserve water quality in Ventura County water bodies. The Program works as a countywide means to locally implement Clean Water Act Requirements. The SQUIMP requires proposed developments to “control the post-development peak storm water runoff discharge rates to maintain or reduce predevelopment downstream erosion and to protect stream habitat.” The SQUIMP addresses stormwater pollution from new and redevelopment by the private sector and contains guidance for implementing and designing Best Management Practices (BMPs) used to reduce impacts.

BMPs can be used for minimizing the introduction of pollutants of concern that may result in significant impacts to the storm water conveyance system from site runoff. Treatment Control BMPs are required for eight categories of development. Additional BMPs may be required by ordinance or code adopted by the City and applied generally or on a case-by-case basis. The City is required to implement the requirements of the SQUIMP, and developers are required to comply with those provisions.

4.6.2 Impact Analysis

a. Methodology and Significance Thresholds. This evaluation is based on the Preliminary Hydrology and Hydraulic Report (Jensen Design & Survey, November 9, 2009) as well as the NPDES Ventura County Municipal Separate Storm Sewer System Permit.

The Rationale Method as described in the Ventura County Hydrology Manual was used to calculate existing and developed peak runoff amounts. Times of concentration for the drainage areas were calculated for existing and future conditions using the Ventura County Watershed Protection District’s Time of Concentration Calculator. The calculated time of concentration was then used to find the intensity for the 10, 50, and 100 year storm events. Runoff hydrographs for each storm event for each drainage area were calculated using the rainfall intensities and soil characteristics for those areas.

Pursuant to the City’s thresholds, impacts would be considered significant if development facilitated by the Project would:

- *Violate any water quality standards or waste discharge requirements*
- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site.*



- *Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.*
- *Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff*
- *Otherwise substantially degrade water quality*
- *Place housing within a 100-year flood hazard area*
- *Place within a 100-year flood hazard area structures that would impede or redirect flood flows*
- *Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, or involving inundation by seiche, tsunami, or mudflow.*

These issues were evaluated in the Initial Study (see Appendix A). Project impacts for these issues were found to be less than significant. However, additional analysis was completed for the EIR to further evaluate storm water discharges and storm water infrastructure. Therefore, the potential to create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems was further evaluated in this section.

In addition, additional CEQA evaluation requirements have come to light since circulation of the initial study. The new Ventura County Municipal Stormwater Permit Section V. *State Statute Conformity* requires each permittee to incorporate into its process no later than November 7, 2009 those additional procedures necessary for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures require consideration of the following.

- *The potential impact of project construction on storm water runoff.*
- *Potential impact of project-post construction activity on storm water runoff.*
- *Potential for discharge of storm water from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling or storage, delivery areas or loading docks, or other outdoor work areas.*
- *Potential for discharge of storm water to impair the beneficial uses of the receiving waters.*
- *Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies.*
- *Potential for significant increases in erosion at the project site or surrounding areas.*

Since these requirements focus on construction and operational storm water quality impacts, the potential for short term and long term storm water quality impacts was also added to this section of the EIR for further analysis.

b. Project Impacts and Mitigation Measures.

Impact HYD-1 Phase I and Phase II development under the CMH Code would involve reconfiguration of the existing watershed areas and Project Area drainage system. Post developed runoff volumes do not exceed pre-developed redeveloped runoff volumes; however, infrastructure upgrades will be necessary. This is a Class II, *significant but mitigable impact*.

Phase I and Phase II development would consist of a new hospital, a small park, realignment of Cabrillo Drive and parking lot improvements, in addition to redevelopment and reuse of other existing developed properties. Since the proposed improvements are similar to the existing condition in terms of impervious area, peak runoff amounts would remain the same as existing runoff amounts, though the boundaries of each watershed within the Project Area have been reconfigured. Figure 4.6-2 shows the boundaries of the reconfigured watershed areas, while Table 4.6-2 shows peak runoff volumes for each of the watersheds.

**Table 4.6-2
Redeveloped Watersheds and Peak Runoff Volumes**

Watershed Name	Area (acres)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	20.8	36.4	52.5	63.9
B	23.6	41.5	59.7	72.7
C	0.4	0.7	1.1	1.3
D	9.8	17.3	24.9	30.3
Total	54.6	95.9	138.1	168.2

Source: Figure 4.6-1 and Figure 4.6-2. Jensen Design & Survey, Inc.

Notes: cfs= cubic feet per second, totals may not add due to rounding

Watershed A. Runoff patterns from Watershed A would remain unchanged from the pre-developed pattern. Re-development of the site, however, would reduce the total area draining towards the catch basins located along North Brent Street. The pre-developed area (comprising Watershed A and Watershed A1) was 24.2 acres, whereas the post-developed area now is 20.8 acres (see Figure 4.6-2).

Watershed B. Runoff patterns from Watershed B would remain unchanged from the pre-developed pattern. Re-development of this site however, would slightly increase the total runoff being collected by the 24" line located along the alley. The existing condition for a Q10 event is 40.5 cfs and developed condition would be 41.5 cfs. The capacity of this line was checked to ensure that this line is capable of handling the slight increase in runoff from within drainage Area B.

Watershed C. Runoff from Watershed C would still sheet flow towards the catch basin located in North Brent Street. However, the total area contributing to this catch basin has significantly decreased from 7.33 acres to 0.42 acres. Most of this area now falls within Watershed D.

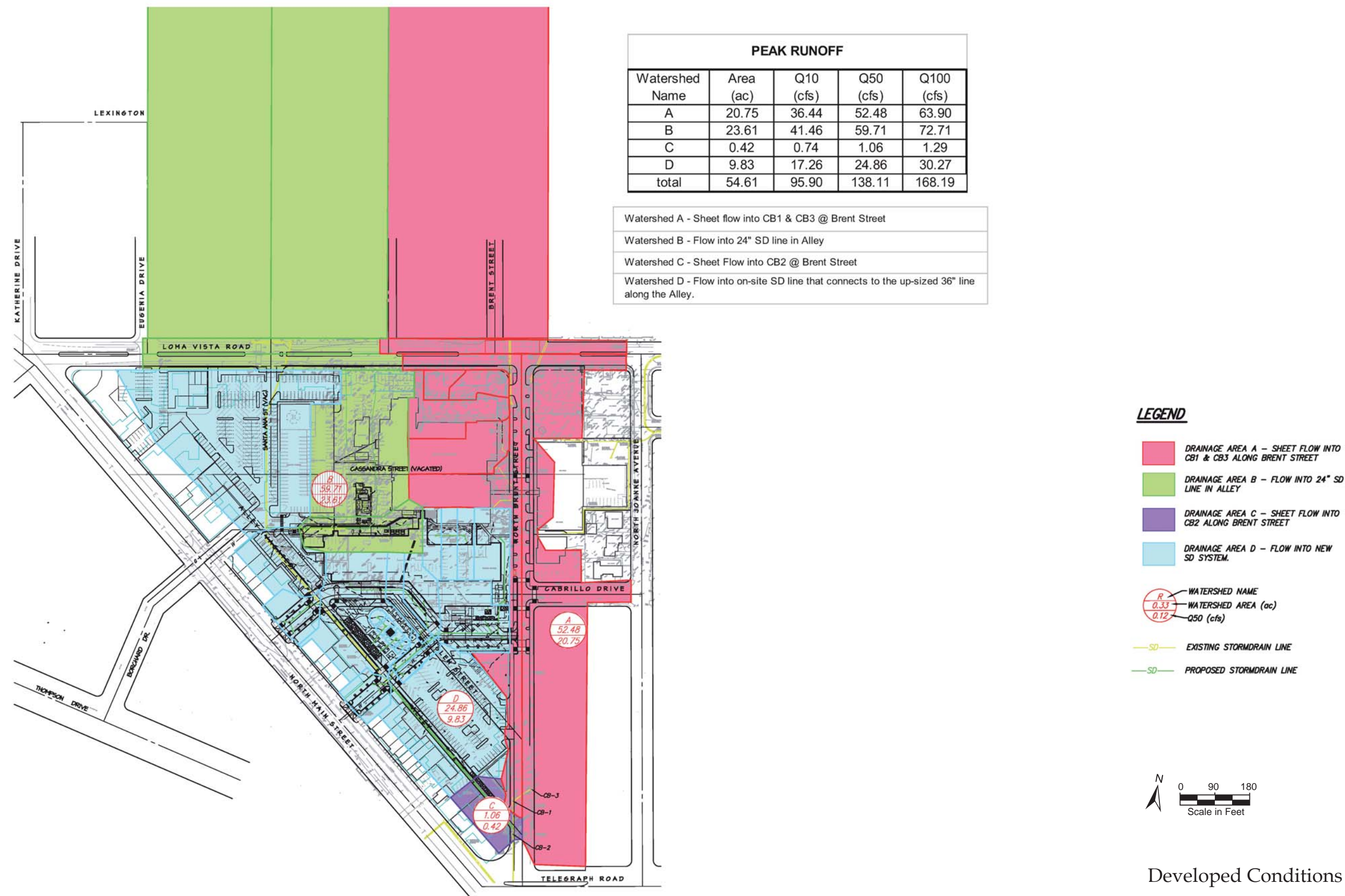
Watershed D. Runoff from Watershed D would be directed to an on-site storm drain system which would connect directly to the existing 24-inch storm drain line in the alley. As this line does not have the capacity to handle the added flows portions would need to be up-sized to 36-inch. This line would still connect directly to the existing 36-inch line in North Brent Street. Post developed peak runoff for the 36-inch Brent Street line would remain unchanged.

Since the pre-developed peak runoff amounts would remain unchanged, no on-site detention is proposed for re-development of the Project Area. The total post developed peak runoff leaving the site for each storm event would be the same as the pre-developed runoff quantities for each storm event up to the Q100. However, as discussed above under subheading Watershed D, runoff quantities discharged to the alley to the existing 24-inch storm drain would exceed the capacity and upgrades would be needed to portions of this storm drain. In addition, redevelopment of roadways and parking areas would disrupt existing storm drain collection components. These facilities would need to be replaced. This is a significant, but mitigable impact.

Mitigation Measures. The following mitigation measure would reduce the impacts associated with storm drain infrastructure upgrades and replacements. Figure 4.6-3 shows the new storm drain system components.

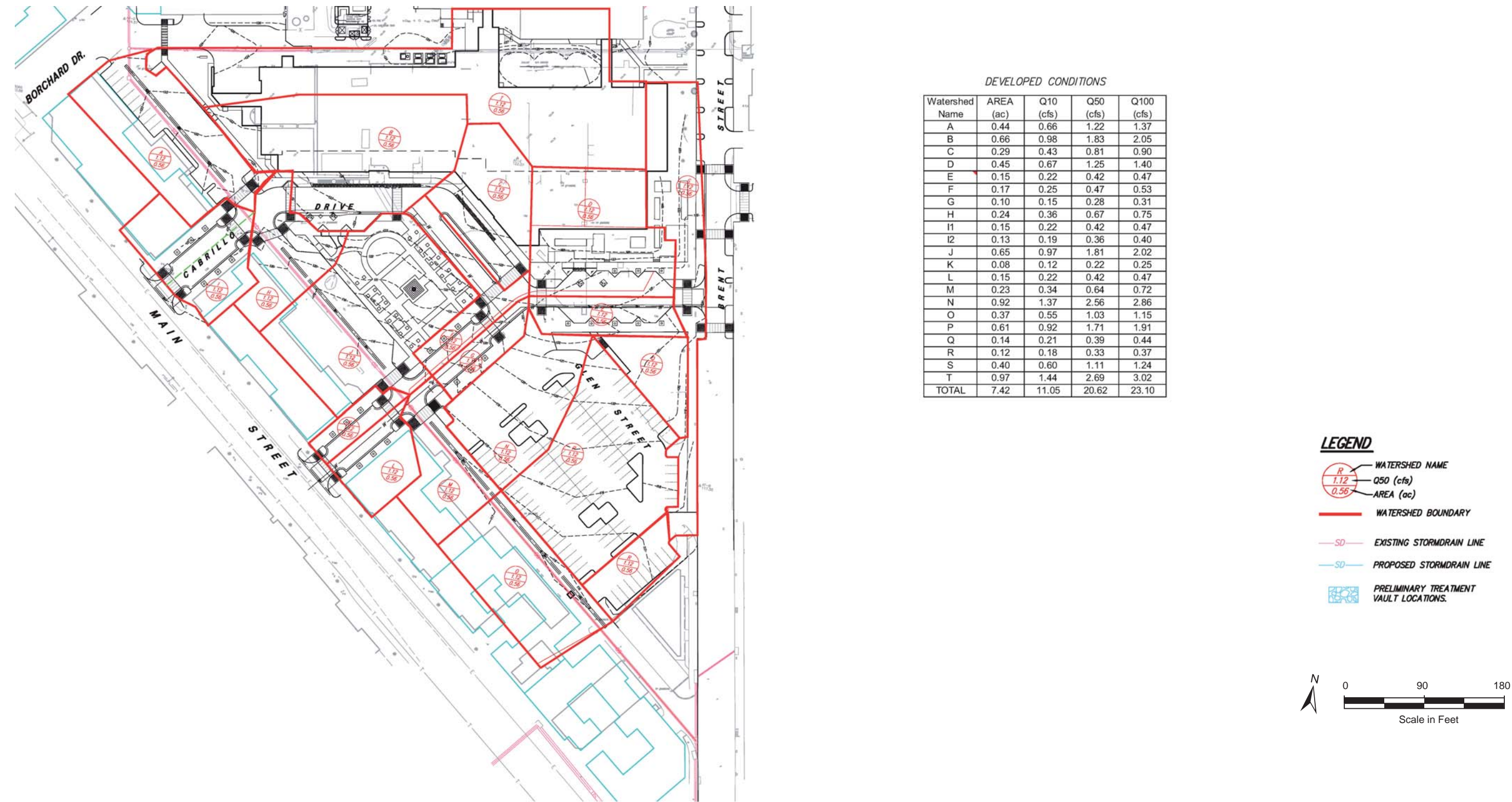
HYD-1 Storm Drain System Improvements. Phase I redevelopment of the site shall include storm drain infrastructure upgrades necessary to ensure that storm water discharges from Phase I and Phase II redevelopment do not exceed the capacity of existing facilities. Improvements shall include the installation of a 36-inch storm drain in the alley as well as catch basins and additional infrastructure upgrades as necessary, in accordance with the Jensen Design & Survey, Inc. November 2009 report, or as superseded by any subsequent updates. Improvements shall be approved by the Public Works Department, prior to commencement of grading or site improvements.

Significance After Mitigation. Impacts would be less than significant with implementation of mitigation measure HYD-1, which includes storm drain infrastructure upgrades that would ensure that Project Area storm water discharges would not exceed the capacity of area drainage facilities.



Drawing source: Jensen Design & Survey, Inc., April 29, 2009.

Figure 4.6-2
City of Ventura



Storm Drain Infrastructure
Improvements
and Watershed Areas

Drawing source: Jensen Design & Survey, Inc., April 17, 2009.

Impact HYD-2 Phase I and Phase II development under the CMH Code could incrementally increase the generation of urban pollutants in surface runoff. Point and non-point sources of contamination could affect water quality downstream. However, implementation of existing regulatory requirements in combination with proposed improvements would reduce impacts to a Class III, *less than significant*, level.

As rainwater passes overland, contaminants become suspended within the flow. In particular, stormwater runoff from landscaped areas, roadways and parking lots contains various pollutants associated with motor vehicles, including petroleum compounds, heavy metals, asbestos, and rubber, as well as, fertilizers and pesticides from landscaped areas. During storm events, these pollutants are transported into drainage systems by surface runoff. The pavement of individual sites reduces the amount of exposed, erodible dirt, resulting in a reduction in sediment loading. With no prior treatment of stormwater runoff, any pollutants retained from the impervious roadway surfaces could enter the downstream surface water bodies including the Mills Road Drain and Arundell Barranca.

Redevelopment under Phase I with construction of the new hospital would disturb an approximate area of five acres including the new hospital, the park area and the reconfigured southern parking area (Jensen Design & Survey, Inc. Nov. 2009). The proposed Hospital Plaza open space area would decrease the percent imperviousness of the site to about 78% (Jensen Design & Survey, Inc. Nov. 2009). Since the total disturbed area is less than 50% of the entire site and the percent imperviousness would decrease, treatment is only required for the redeveloped area (five acres) of the site (Jensen Design & Survey, Inc. Nov. 2009).

The Project would take advantage of several grassy areas throughout to allow for infiltration and treatment of rain water to comply with applicable NPDES requirements. The required runoff would be diverted to the proposed treatment facilities for treatment and infiltration. Figure 4.6-4 shows the preliminary locations for these facilities. These facilities would be designed to provide treatment and infiltration of $\frac{3}{4}$ " of the runoff from the redeveloped site. Thus, considering redevelopment of about five acres under Phase I, the required volume that needs to be treated and infiltrated is 13,620 cubic feet (Jensen Design & Survey, Inc. Nov. 2009). To identify treatment facilities, the site was divided into three areas (see Figure 4.6-4), which are described below.

- Treatment Area 1 represents the new hospital building, including runoff from watersheds D7-D11
- Treatment Area 2 represents the Hospital Plaza open space area, including runoff from watersheds D1-D6
- Treatment Area 3 represents the new parking area, including runoff from watersheds D12-D15

Preliminary volume calculations and the locations of the treatment facilities are shown on Figure 4.6-4. To prevent debris, sediment and trash from entering the proposed treatment facilities, all storm drain inlets would be fitted with Kristar Flogard Plus storm drain filters. These filters would also capture oils and grease, metals, gasoline, suspended solids and pathogens.

As discussed in the *Setting*, the Ventura County SQUIMP applies to the operational runoff and requires new developments and redevelopment projects to implement various BMPs to minimize the amount of pollutants entering surface waters. All projects that fall into one of eight categories are identified in the Ventura Countywide Municipal Permit as requiring SQUIMPs. These categories include: (1) single family hillside residences; (2) 100,000 square foot commercial developments; (3) automotive repair shops; (4) retail gasoline outlets; (5) restaurants; (6) home subdivisions with 10 or more housing units; (7) location within or directly adjacent to or discharging directly to an environmentally sensitive area; and (8) parking lots with 5,000 square foot or more impervious parking or access surfaces with 25 or more parking spaces and potentially exposed to stormwater runoff.

Since the project consists of about 356,000 sf new hospital, 3,900 sf of retail and surface parking under Phase I as well as 162,950 square feet of medical office redevelopment and a surface 570 space parking garage under Phase II, the Project is subject to SQUIMP requirements for implementing stormwater BMPs. Per the SQUIMP, structural or treatment control BMPs must meet the following design standards:

- *Volume based post-construction structural or treatment control BMPs shall be designed to mitigate (infiltrate or treat) storm water runoff from the volume of annual runoff to achieve 80% volume capture (Ventura County Land Development Guidelines); or*
- *Flow-based post-construction structural or treatment control BMPs shall be sized to handle the flow generated from 10% of the 50-year design flow rate.*

In addition to these standards, the 2005 General Plan includes the following actions aimed at minimizing impacts to the local storm drain system and surface and groundwater quality.

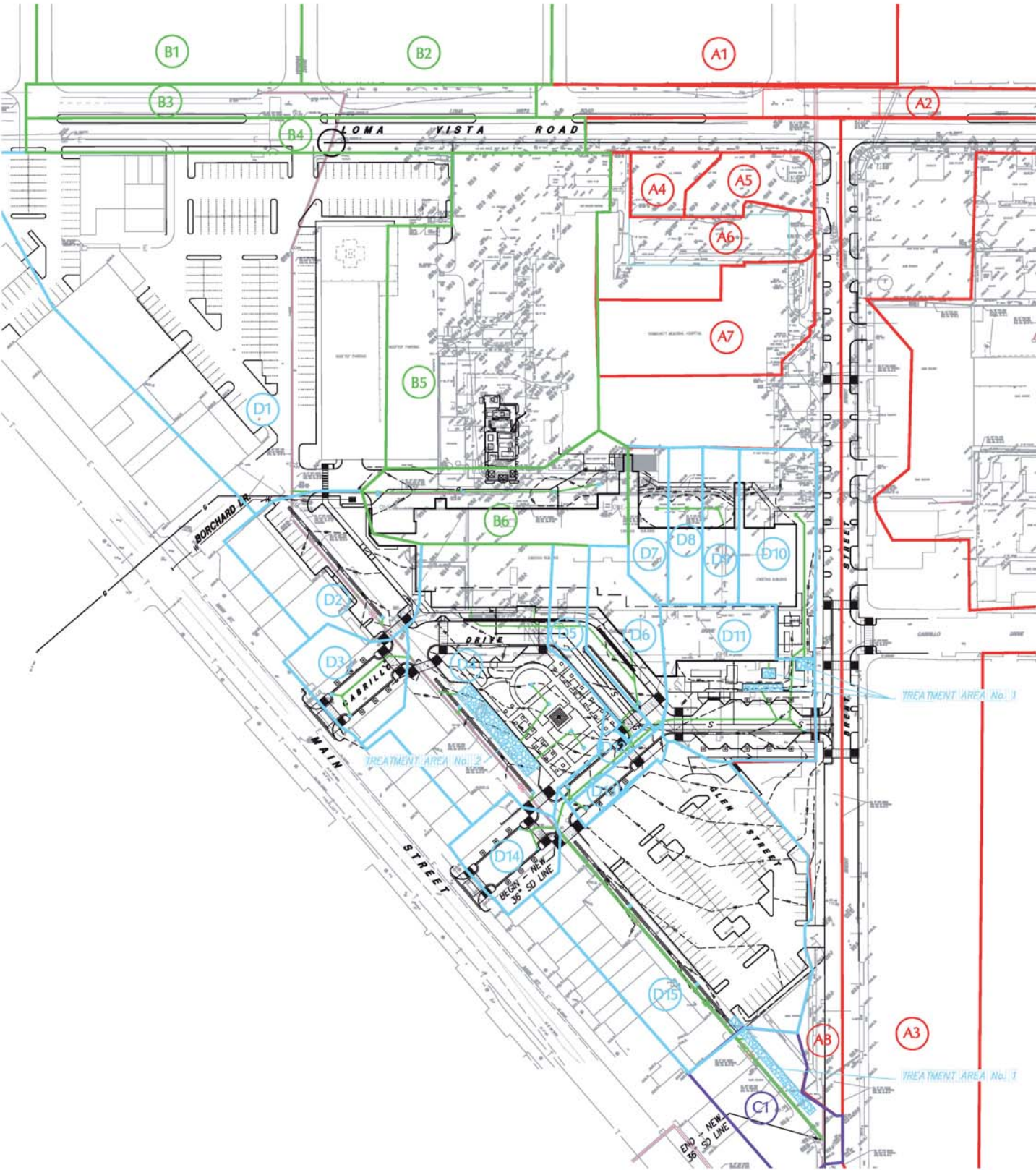
- Action 1.16 Comply with directives from regulatory authorities to update and enforce storm water quality and watershed protection measures that limit impacts to aquatic ecosystems and that preserve and restore the beneficial uses of natural watercourses and wetlands in the city.*
- Action 5.2 Use natural features such as bioswales, wildlife ponds, and wetlands for flood control and water quality treatment when feasible.*

Installation of water quality BMPs in conjunction with new development, as required by the Ventura County SQUIMP (as discussed above), would mitigate potential urban runoff pollutants. In many instances, replacement of older development with new development built in accordance with current runoff and water quality control standards may reduce contaminants entering surface water and groundwater. Impacts to water quality as a result of redevelopment facilitated under Phase I and Phase II pursuant to the CMH Code would be less than significant.

Mitigation Measures. Implementation of existing and proposed policies and actions, in combination with existing regulations, would reduce water quality impacts to a less than significant level. Mitigation is not required.

Significance After Mitigation. The impact is less than significant without mitigation.





DEVELOPED CONDITIONS

PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	20.75	36.44	52.48	63.90
B	23.61	41.46	59.71	72.71
C	0.42	0.74	1.06	1.29
D	9.83	17.26	24.86	30.27
total	54.61	95.90	138.11	168.19

Watershed A

PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A1	12.76	22.41	32.27	39.30
A2	0.52	0.91	1.32	1.60
A3	4.26	7.48	10.77	13.12
A4	0.14	0.25	0.35	0.43
A5	0.21	0.37	0.53	0.65
A6	0.52	0.91	1.32	1.60
A7	0.58	1.02	1.47	1.79
A8	1.76	3.09	4.45	5.42
Total	20.75	36.44	52.48	63.90

Watershed B

PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
B1	10.26	18.02	25.95	31.60
B2	9.65	16.95	24.40	29.72
B3	0.53	0.93	1.34	1.63
B4	0.60	1.05	1.52	1.85
B5	1.90	3.34	4.81	5.85
B6	0.67	1.18	1.69	2.06
Total	23.61	41.46	59.71	72.71

Watershed C

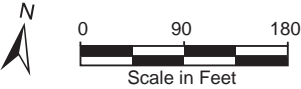
PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
C1	0.42	0.74	1.06	1.29
Total	0.42	0.73752	1.06218	1.293498

Watershed D

PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
D1	3.34	5.87	8.45	10.29
D2	0.61	1.07	1.54	1.88
D3	0.28	0.49	0.71	0.86
D4	1.29	2.27	3.26	3.97
D5	0.20	0.35	0.51	0.62
D6	0.30	0.53	0.76	0.92
D7	0.18	0.32	0.46	0.55
D8	0.16	0.28	0.40	0.49
D9	0.18	0.32	0.46	0.55
D10	0.43	0.76	1.09	1.32
D11	0.65	1.14	1.64	2.00
D12	0.08	0.14	0.20	0.25
D13	0.09	0.16	0.23	0.28
D14	0.24	0.42	0.61	0.74
D15	1.80	3.16	4.55	5.54
Total	9.83	17.26	24.86	30.27

LEGEND

- WATERSHED NAME
- WATERSHED AREA (ac)
- Q50 (cfs)
- WATERSHED BOUNDARY
- EXISTING STORMDRAIN LINE
- PROPOSED STORMDRAIN LINE
- PRELIMINARY INFILTRATION TRENCH LOCATIONS



Stormwater Treatment Areas

Impact HYD-3 Construction activities have the potential to contribute sediment and urban pollutants to downstream waterways. However, implementation of existing regulatory requirements reduces impacts to a Class III, *less than significant*, level.

Construction activities could result in the pollution of natural watercourses. The types of pollutant discharges that could occur as a result of construction include accidental spillage of fuel and lubricants, discharge of excess concrete, and an increase in sediment runoff.

Discharge of pollutants from any point source is prohibited unless it is in compliance with the National Pollutant Discharge Elimination System (NPDES) Permit issued by the Regional Water Quality Control Board. Point sources of pollutants of greatest concern include nutrients (ammonia and nitrate), heavy metals, toxic chemicals, chlorine, and salts. Non-point sources of pollutants, which are also regulated under NPDES permits, include both construction-related runoff and operational runoff associated with urban uses. Surface runoff from within the Project Area is carried to City storm drains and eventually to the Mills Road Drain and Arundell Barranca.

Regulations under the federal Clean Water Act require that projects that would disturb greater than one acre during construction comply with the statewide NPDES general construction storm water permit. Compliance with the NPDES permit is dependent on the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains specific actions, termed Best Management Practices (BMPs), to control the discharge of pollutants, including sediment, into the local surface water drainages. In the State of California, Regional Water Quality Control Boards administer the NPDES permit process. Development facilitated by Phase I and Phase II the CMH Code would be required to comply with NPDES requirements.

Implementation of these standards on future development and redevelopment projects within the Project Area under the CMH Code would address impacts on a project-by-project basis, thus reducing surface water quality impacts to a less than significant level.

Mitigation Measures. Implementation of existing and proposed policies and actions, in combination with existing regulations, would reduce water quality impacts to a less than significant level. Mitigation is not required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

c. Cumulative Impacts. As discussed in Section 3.0 Environmental Setting, the Project Area is located geographically within the central western portion of the City of Ventura. The area is mostly impervious and covered by buildings and pavement, with pervious area consisting mostly of residential yards, school yards, parks and the open space areas that lie along the hilltops to the north east above Poli Street. Cumulative development consists of redevelopment within the urbanized City, and similar to the project, involves in-kind replacement of pavement and structures. Therefore, large increases in runoff volumes that would adversely affect downstream district facilities are not anticipated.

Implementation of Phase I and Phase II of the Project, in combination with about 8,000 dwelling units and five million square feet of non-residential development under the 2005 General Plan (see Table 3-1 in Section 3.0, *Environmental Setting*) will increase the amount of impervious surfaces that in turn will concentrate flow, and increase volume and velocity of runoff. Moreover, as shown in Table 3-2, in Section 3.0, *Environmental Setting*, planned and pending development within ½ mile of the project site would include development of 83 residential units and 83,416 sf of non-residential development. This development has the potential to intensify the already built environment. Similar to the Project, all planned and pending projects are subject to compliance with SQUIMP, the NDPES permit and 2005 General Plan policies and actions. Individual developments would be evaluated on a case-by-case basis to ensure that the post-developed condition does not generate an increase in runoff. Similar to the Project, localized improvements may be required as necessary; however, adverse cumulative impacts would not occur due to individual project compliance with requirements. Cumulative impacts to water quality, and storm water infrastructure would not be significant.

4.7 LAND USE and PLANNING

This section summarizes the proposed project's potential land use impacts attributable to the project's consistency with applicable plans and compatible with surrounding land uses. General Plan policies and actions related to aesthetics are discussed in Section 4.1, *Aesthetics*.

4.7.1 Setting

a. Lead Agency Actions. The City of Ventura is acting as the lead agency, with discretionary approval over the Community Memorial Hospital District Development Code ("Code") and subsequent projects within the Hospital District. Discretionary approval is not required from any agency except for the City of Ventura.

As indicated in Section 2.0 *Project Description*, the proposed project would require the following discretionary approvals from the City:

- *Certification of the Final EIR*
- *Adoption of the Community Memorial Hospital District Development Code*
- Modification of the Midtown Corridors Development Code to:
 - Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the area covered by the Midtown Corridors Development Code;
 - Designate open space in the area still to be governed by the Midtown Corridors Development Code;
 - Add a shopfront overlay frontage type to interior street and open space frontages in the area still to be governed by the Midtown Corridors Development Code; and
 - Remove the terminated vistas designation from Borchard Street in the area still to be governed by the Midtown Corridors Development Code.
- Zone Change from Hospital (H), Professional Office (P-O), and Urban Center Zone (T5.2) to Hospital District (SD:H1) and Open Space (OS).
- Site Plan approval of the hospital building and other buildings to be constructed in Phase I of the proposed project (which would complete the approval of Phase I subject to design review).
- Design Review of the hospital building and other buildings to be constructed in Phase I of the proposed project
- A Memorandum of Understanding between the City and Community Memorial Health System.

- City Council approval of the Water Supply Assessment

By readjusting the Midtown Corridors Code boundaries to the west, the properties in the Project Area that do not front Main Street or form Midtown Corridor Code corner frontage would be removed from the Midtown Corridors Code boundaries and would be subject to the CMH Code. The properties subject to the CMH Code would be located south and west of the hospital. Figure 2-2(b) in Section 2.0, *Project Description*, shows the zoning modification boundaries for the Midtown Corridors and the CMH Code. The portion of the Project Area that would be removed from the Midtown Corridors Code would be rezoned to Hospital District (SD:H1). The exiting Hospital Zone and Professional Office Zone would also be rezoned to SD:H1. Figure 2-2(c) in Section 2.0, *Project Description*, shows the geographic extent of this area, which is roughly bounded by an alley to the west, Loma Vista Road to the north and North Brent Street to the east.

With regard to project approvals for the new hospital and ancillary projects within Phase I, discretionary project approvals for the new hospital building would include design review pursuant to the new CMH Code. Further discretionary approvals are not anticipated, although non-discretionary approvals such as building permits and certificates of occupancy are expected. Individual projects within the Hospital District that may be constructed during Phase II may require discretionary and/or non-discretionary approvals.

The Memorandum of Understanding (MOU) between the City and CMH establishes a binding agreement between the City and Community Memorial Health Systems (CMHS, the owner and operator of the hospital) regarding various obligations of the City and CMHS. The MOU will establish, for example, CMHS's responsibilities for relocating and/or maintaining public improvements (including landscaping, sidewalks, medians, and street lighting) and utilities on portions of Cabrillo Drive and Glen Street, providing new street connections in the area, and developing the public plaza in front of the hospital. The MOU would also include provisions regarding replacement parking and traffic mitigation fees. With regard to City obligations, the MOU would establish City obligations regarding rights-of-way for street connections, private improvements within public rights-of-way, the leasing of City property for the public plaza and certain buildings, the establishment of permit parking in the residential areas surrounding the hospital, and the design and construction of a parking garage and the Borchard Drive/Virginia Drive extension.

b. Regulatory Policy Applicability. Pursuant to CEQA Guidelines Section 15125(d), an EIR shall discuss a project's consistency with applicable general plans and regional plans. Applicable plans are discussed below.

City of Ventura. Currently, the City's General Plan and zoning regulations, including the Midtown Corridors Development Code, apply to the project site.

2005 General Plan. The Ventura General Plan was adopted in 2005. The 2005 General Plan establishes the land use designations, policies, programs, standards, and goals for development in the City and its sphere of influence through 2025. The 2005 General Plan is a formal expression of community goals and desires. Table 2-1 in Section 2.0, *Project Description*, lists the existing Project Area characteristics. Each of the General Plan land use designations within the Project Area is shown on Figure 2-4 in Section 2.0, *Project Description*.

The west and southeast portions of the Project Area are designated as “Commerce” on the 2005 General Plan Land Use Map, while the northeast corner of the Project Area is designated as “Public and Institutional” on the General Plan Land Use Map (see Figure 2-4 in Section 2.0, *Project Description*). The “Commerce” designation “encourages a wide range of building types of anywhere from two to six stories (depending on neighborhood characteristics) that house a mix of functions, including commercial, entertainment, office and housing.” The “Public and Institutional” designation “accommodates civic functions such as government offices, hospitals, libraries, schools and public green space.”

The southern portion of the Project Area, which is currently developed with a rectangular surface parking lot, is designated for residential development as “Neighborhood Low” (0-8du/acre). This designation “emphasizes detached houses with some attached units in a small mix of building types from 0 up to 8 dwelling units per acre. Predominantly residential, with opportunity for limited home occupation and neighborhood services sensitively located along corridors and at intersections.”

The 2005 General Plan describes a number of subareas within the City, including “corridors.” According to the General Plan, corridors “can be natural or urban, [and] often form boundaries, as well as connections, between neighborhoods and/or districts.” “Urban corridors can be transportation thoroughfares that frequently encompass major access routes, especially ones with commercial destinations, including transit routes and rail lines.” The General Plan designates corridors as areas “where the development of housing alongside commercial uses is specifically encouraged.” Corridors are growth priority areas, and the General Plan provides qualitative descriptions of each corridor’s present and proposed attributes.

The Project Area is within the Loma Vista Road Corridor as identified by the 2005 General Plan. The Loma Vista Road Corridor is described as the preferred place to focus on creating a concentration of medical and research-centered business. The Project Area is also partially contained within the Main Street Corridor and the Telegraph Road Corridor. The Main Street Corridor is “currently a commerce-oriented area with a limited amount of mixed use development, [and] this corridor displays the broadest range of architectural types and styles in the city, as well as the widest spectrum of transect characteristics. It has the most potential for increased mixed use and housing with improved streetscape and pedestrian enhancement to slow traffic.” The Telegraph Road corridor is “a sub-urban-scale commercial area with some detached homes and multifamily buildings. The City’s bus transfer station is located along this corridor, creating the perfect opportunity for a multi-modal connection with an intense node of housing and employment. The streetscape could change character along its length, with a mixture of intensities of development.”

Zoning Regulations (Midtown Corridors Development Code and Proposed Community Memorial Hospital District Development Code). Currently, the Midtown Corridors Development Code, a form-based development code, guides development within the Project Area. A form-based code is an alternative to traditional planning and organizes development by physical form rather than by separation of uses. A form-based code is often intended to encourage pedestrian-oriented and mixed-use development. The Midtown Code is available on the City’s website as Midtown 24M100 through 24M300 at <http://www.cityofventura.net/cd/planning/citydesign>. The Midtown Corridors Development Code regulates form and land uses in the vicinity of the Main Street and

Thompson Boulevard corridors. As shown on Figure 2-5 in Section 2.0, *Project Description*, the Midtown Corridors Development Code currently regulates zoning of all land uses within the Project Area, except the property that contains CMH and the property between the hospital and Cabrillo Drive.

The Community Memorial Hospital District Development Code would supplant the Midtown Corridors Code for most of the Project Area. The Project Area would be governed, then, by either the Hospital District Code or Midtown Corridors Development Code. Properties along the Main Street corridor would remain subject to the Midtown Corridors Development Code (see Figure 2-6 in Section 2.0, *Project Description*). In addition, a City-owned open space area planned for a triangular area west of the future Borchard Drive extension and opposite the existing Parking Garage would be subject to the Midtown Code. The Midtown Code would be amended to address the relocation of the Midtown Code boundaries. Other minor amendments to the Midtown Code include adding a shopfront overlay to interior street and open space frontages (see Figure 2-6 in Section 2.0, *Project Description*); and removing the terminated vistas designation from Borchard Street.

The proposed CMH Code is a form-based code that was developed to be consistent with the Midtown Corridors Development Code. In particular, the CMH Code aims for development that is pedestrian oriented, incorporates a mix of land uses, and has effective circulation elements. The proposed CMH Code would define the Hospital District (SD:H1) zoning designation. The CMH Code would also include an Open Space Zone (OS) designation. Two open space areas are planned as part of the Hospital District, including the Hospital Plaza, which would be located opposite the entry to the hospital, as well as a plaza at the southeast corner of the future intersection of the Borchard Drive extension at Loma Vista Road. Also envisioned under the CMH Code is the realignment of Cabrillo Drive west of North Brent Street. Under the CMH Code, Cabrillo Drive would be moved approximately 50 feet to the south at its intersection with North Brent Street, and would continue westward for about 200 feet, branching into two streets. The north branch would connect with the existing Cabrillo Drive alignment and outlet on Main Street as occurs currently, while the south branch would outlet on Main Street to create a new pedestrian and vehicular linkage to the hospital district and new open space area.

Section 4.8, *Water Supply*, discusses the proposed project's impacts on the water supply and the City's Urban Water Management Plan (UWMP). As discussed in Section 4.8, the proposed CMH Code is consistent with the UWMP.

Regional Plans. The EIR discusses whether the project is consistent with applicable policies of the Ventura County Air Pollution Control District and the governing Air Quality Management Plan (AQMP) in Section 4.2, *Air Quality*. As discussed in Section 4.2, the proposed CMH Code is consistent with the AQMP.

4.7.2 Impact Analysis

a. Methodology and Significance Thresholds. A significant impact would occur if the project would (1) physically divide an established community; (2) conflict with any applicable governing land use plan, policy, or regulation; or (3) conflict with any applicable habitat conservation plan or natural community conservation plan.



b. Project Impacts and Mitigation Measures.

The Hospital District area currently contains a hospital, medical offices, commercial uses, and residences. Land uses surrounding the Project Area include commercial uses, medical offices, and residences. The CMH Code would facilitate redevelopment of an area already containing medical office and hospital uses, and would integrate planned streetscapes, open spaces and supporting commercial retail development. Therefore, implementation of the CMH Code would not physically divide an established community. There would be a less than significant impact with respect to physical division of an established community.

Furthermore, the amendments to the Midtown Corridors Development Code and the new CMH Code were designed to be compatible with the existing Midtown Corridors Development Code, which guides development in the vicinity of the Hospital District and would still guide development within a portion of the Project Area (properties along the Main Street corridor would remain subject to the Midtown Code). The Midtown Code encourages the same goals as the proposed CMH Code: furthering an intensive, pedestrian-oriented area with a mixture of land uses that are compatible through effective urban and architectural design.

The Midtown Code identifies the property surrounding the Project Area as an Urban Center Zone with some residential overlay. An Urban Center Zone “consists of higher density mixed-use building types that accommodate retail, office, rowhouses and apartment uses. It has a tight network of streets with wide sidewalks, steady tree planting, and buildings set close to the frontages.” In general, the Urban Center Zone permits numerous uses, including residential, retail, educational, and medical services. Under the City’s form-based codes, the design standards and regulations in the neighboring Midtown Code area and for the Hospital District will be consistent with regard to building and frontage standards as well as street and streetscape requirements. Both Codes are designed to encourage a more urban, pedestrian-oriented area. The proposed CMH Code and proposed Midtown Code amendments are consistent with the existing Midtown Code. Therefore, impacts would be less than significant.

Mitigation Measures. The proposed Code would not physically divide an existing community and is consistent with the existing Midtown Code. No mitigation is required.

Significance After Mitigation. The impact with respect to the existing community and Midtown Code would be less than significant without mitigation.

Impact LU-2 The proposed Community Memorial Hospital District Development Code is consistent with and implements policies and actions of the 2005 General Plan, in particular the applicable land use and corridor designations. The CMH Code provides development standards specific to the Hospital District area that would not conflict with other regulatory planning documents. The CMH Code is also consistent with the General Plan’s growth projections and implementation policies. This is a Class III, *less than significant*, impact.

According to the 2005 City of Ventura General Plan, the west and southeast portions of the Project Area are designated as “Commerce” on the 2005 General Plan Land Use Map, while the northeast corner of the Project Area is designated as “Public and Institutional” on the



General Plan Land Use Map (see Figure 2-4 in Section 2.0, *Project Description*). As noted above, the “Commerce” designation “encourages a wide range of building types of anywhere from two to six stories (depending on neighborhood characteristics) that house a mix of functions, including commercial, entertainment, office and housing.” The proposed uses within the “Commercial” designation are consistent with this designation. The hospital use is consistent with the “Public and Institutional” designation. The CMH Code also includes permitted uses, including open space and neighborhood service uses that are consistent with the portion of the site designated as “Neighborhood Low.”

The Hospital District is located within the Loma Vista Road corridor and partially within the Telegraph Road and Main Street corridor zones. As noted above, according to the General Plan, the Loma Vista Road corridor “is a mix of commercial and residential development” “with a high concentration of medical facilities.” It “is the ideal place for Ventura to focus on creating a concentration of medical and research-oriented business.” The Telegraph Road corridor is a “sub-urban-scale commercial area with some detached homes and multi-family buildings.” Its proximity to public transportation presents “the perfect opportunity for a multi-modal connection with an intense node of housing and employment.” Finally, the Main Street corridor is a “commerce-oriented area” with “the most potential for increased mixed use and housing.”

The proposed Hospital District uses, including the expanded hospital and the Phase II uses (likely medical office but potentially commercial or residential uses) are consistent with the corridor plans. The goal of the CMH Code is to provide pedestrian-oriented development that is guided by a form-based code and not traditional zoning regulations that separate land uses. Consequently, the CMH Code encourages the relatively intense, mixed-use concept desired in each of the applicable corridors. With regard to the primary Loma Vista Road corridor, the CMH Code would facilitate the expansion and continuance of the hospital, which will itself provide medical services but also maintain and spur continued concentrated medical use in the area. The proposed CMH Code would preserve the Hospital District’s consistency with the General Plan.

As discussed in Sections 3.0, *Environmental Setting*, and 5.0, *Growth Effects and Other CEQA Sections*, the proposed project is consistent with the predictions of future development in the 2005 General Plan.

The proposed CMH Code is consistent with the vision of the 2005 General Plan as it would implement the following General Plan policies.

Chapter 1, Our Natural Community. The Goal of Chapter 1 of the General Plan is to be a model of environmental responsibility for other communities, living in balance with our natural setting of coastline, rivers, and hillside ecosystems. The 2005 General Plan policies and actions that are pertinent to the CMH Code include:

Policy 1D: Expand the use of green practices.

Consistency: As described in Section 5.0, *Growth Effects and Other CEQA Sections*, the proposed hospital expansion would provide measures to reduce its greenhouse gas emissions and would proceed under the Green Guide for Health Care. Furthermore, as discussed in

Section 4.8, *Water Supply*, the hospital would implement water conservation measures to reduce its water use. Therefore, the CMH Code is consistent with Chapter 1 of the General Plan.

Chapter 2, Our Prosperous Community. The Goal of Chapter 2 of the General Plan is to attract and retain enterprises that provide high-value, high-wage jobs; to diversify the local economy; to increase the local tax base; and to anticipate our economic future in order to strengthen our economy and help fund vital public services. The 2005 General Plan policies and actions that are pertinent to the CMH Code include:

Policy 2B: Make the local economic climate more supportive of business investment.

Action 2.4: Map priority locations for commercial and industrial development and revitalization, including a range of parcel sizes targeted for high-technology, non-durables manufacturing, finance, business services, tourism, and retail uses.

Consistency: The CMH Code preserves the existing Community Memorial Hospital and seeks to revitalize the Hospital District area to provide further opportunities for commercial (particularly medical office) uses. Consequently, the Hospital District will continue to provide high-value, high-wage employment opportunities. Therefore, the CMH Code is consistent with Chapter 2 of the General Plan.

Chapter 3, Our Well Planned Community. Chapter 3 of the General Plan seeks to protect our hillsides, farmlands and open spaces; enhance Ventura's historic and cultural resources; respect our diverse neighborhoods; reinvest in older areas of our community; and make great places by insisting on the highest standards of quality in architecture, landscaping and urban design. The 2005 General Plan policies and actions that are pertinent to the CMH Code include:

Policy 3A: Sustain and complement cherished community characteristics and values.

Action 3.2: Enhance the appearance of districts, corridors, and gateways (including views from highways) through controls on building placement, design elements, and unobtrusive directional signage.

Policy 3B: Integrate uses in building forms that increase choice and encourage community vitality.

Action 3.9: Adopt new development code provisions that designate areas within districts and corridors for mixed-use development that combines businesses with housing, and focuses on the redesign of single-use shopping centers and retail parcels into walkable, well connected blocks, with a mix of building types, uses, and public and private frontages.

Action 3.12: The City will work with the hospitals on the new Development Code treatment for the Loma Vista corridor, which includes both hospitals.

Policy 3C: Maximize use of land in the City before considering expansion.



Action 3.18: Complete community or specific plans, subject to funding, for areas such as Westside, Midtown, Downtown, Wells, Saticoy, Pierpont, Harbor, Loma Vista/Medical District, Victoria Corridor, and others as appropriate. These plans will set clear development standards for public and private investments, foster neighborhood partnerships, and be updated as needed.

Consistency: The CMH Code is consistent with the General Plan's Well Planned Community policies because it would provide development and design guidelines that would enhance the appearance of the Hospital District and, while expanding Community Memorial Hospital at its existing improved site, also create a walkable, pedestrian-oriented, and mixed-use district that would be compatible with neighboring uses and areas. All development within the Hospital District would be designed and developed according to uniform standards to carefully guide building placement, design elements, and signage. Therefore, the CMH Code is consistent with Chapter 3 of the General Plan.

Chapter 4, Our Accessible Community: Chapter 4 of the General Plan is the City's Circulation Element. The opening paragraph, which summarizes the transportation philosophy of the City, states: "Our Goal is to provide residents with more transportation choices by strengthening and balancing bicycle, pedestrian and transit connections within the City and the surrounding region." The following policies and actions of the 2005 General Plan are implemented by the CMH Code:

Policy 4A: Ensure that the transportation system is safe and easily accessible to all travelers.

Policy 4B: Help reduce dependence on the automobile.

Consistency: The CMH Code implements the above General Plan policies by accommodating the diverse needs of all transportation modes – pedestrians, bicyclists, and motor vehicles. With regard to the latter, the CMH Code would foremost provide a well-organized shared parking supply, which is designed to spur additional private development along Main Street. Along with tree-lined sidewalks, curbside parking, slower but smooth traffic flows, and numerous specially marked pedestrian crosswalks, the new buildings would create the pedestrian-friendly character envisioned by the Midtown Code. The Hospital District would be regenerated from a complex collection of disparate buildings into a coherent, mixed-use, and pedestrian-oriented town center. Pedestrian access to all buildings within the Hospital District would be provided from the adjacent streets, and the proposed Shopfront Overlay identifies street frontages intended to become or be maintained as areas for retail shops and other pedestrian-oriented uses at the sidewalk level. Therefore, the CMH Code is consistent with Chapter 4 of the General Plan.

Chapter 5, Our Sustainable Infrastructure. Chapter 5 of the General Plan relates to infrastructure and basic policies for conservation. Policies and actions pertinent to the CMH Code include:

Policy 5A: Follow an approach that contributes to resource conservation.

- Action 5.1: Require low flow fixtures, leak repair, and drought tolerant landscaping (native species, if possible), plus emerging new water reclamation techniques.*
- Policy 5B: Improve services in ways that respect and even benefit the environment.*
- Action 5.6: Require project proponents to conduct sewer collection system analyses to determine if downstream facilities are adequate to handle the proposed development.*
- Action 5.7: Require project proponents to conduct evaluations of the existing water distribution system, pump station, and storage requirements in order to determine if there are any system deficiencies or needed improvements for the proposed development.*
- Action 5.16: Require new developments to incorporate stormwater treatment practices that allow percolation to the underlying aquifer and minimize offsite surface runoff utilizing methods such as pervious paving material for parking and other paved areas to facilitate rainwater percolation and retention/detention basins that limit runoff to pre-development levels.*
- Action 5.17: Require stormwater treatment measures within new development to reduce the amount of urban pollutant runoff in the Ventura and Santa Clara Rivers and other watercourses.*

Consistency: As discussed in more detail in Section 4.8, *Water Supply*, the proposed hospital expansion would utilize water conservation features that would reduce impacts to water supplies. Similarly, the Initial Study (Section O, *Utilities and Service Systems*, see Appendix A) discusses sewer and water distribution. Finally, the proposed hospital would comply with all stormwater requirements to reduce urban pollutant runoff as discussed in Section 4.6, *Hydrology and Water Quality*. Therefore, the CMH Code is consistent with Chapter 5 of the General Plan.

Chapter 7, Our Healthy and Safe Community: Chapter 7 of the General Plan has the goal of building effective community partnerships that protect and improve the social well-being and security of all citizens. The following policies and actions of the 2005 General Plan are implemented by the CMH Code:

- Policy 7A: Encourage wellness through care and prevention.*
- Action 7.1: Work with interested parties to identify appropriate locations for assisted-living, hospice, and other care-provision facilities.*
- Policy 7B: Minimize risks from geologic and flood hazards.*
- Action 7.8: To the extent feasible, require new critical facilities (hospital, police, fire, and emergency service facilities, and utility “lifeline” facilities) to be located outside of fault and tsunami hazard zones, and require critical facilities within hazard zones to incorporate construction principles that resist damage and facilitate evacuation on short notice.*

- Policy 7D: Minimize exposure to air pollution and hazardous substances.*
- Action 7.21: Require analysis of individual development projects in accordance with the most current version of the Ventura County Air Pollution Control District Air Quality Assessment Guidelines and, when significant impacts are identified, require implementation of air pollutant mitigation measures determined to be feasible at the time of project approval.*
- Action 7.22: In accordance with Ordinance 93-37, require payment of fees to fund regional transportation demand management (TDM) programs for all projects generating emissions in excess of Ventura County Air Pollution Control District adopted levels.*
- Action 7.23: Require individual contractors to implement the construction mitigation measures included in the most recent version of the Ventura County Air Pollution Control District Air Quality Assessment Guidelines.*
- Action 7.25: Adopt new development code provisions that ensure uses in mixed-use projects do not pose significant health effects.*
- Policy 7E: Minimize the harmful effects of noise.*
- Action 7.32: Require acoustical analyses for new residential developments within the mapped 60 decibel (dBA) CNEL contour, or within any area designated for commercial or industrial use, and require mitigation necessary to ensure that: exterior noise in exterior spaces of new residences and other noise sensitive uses that are used for recreation (such as patios and gardens) does not exceed 65 dBA CNEL; and interior noise in habitable rooms of new residences does not exceed 45 dBA CNEL with all windows closed.*

Consistency: One purpose of the CMH Code is to preserve the existing hospital in its existing, non-hazardous location while ensuring that the hospital satisfies state seismic regulations. The expanded hospital would consequently provide additional protections to patients from seismic hazards. As discussed in Section 4.2, *Air Quality*, air quality impacts would be mitigated to a less than significant level pursuant to Ventura County APCD guidelines. The CMH Code would comply with Ordinance 93-37 and individual contractors would utilize the latest APCD mitigation measures. Also as discussed in Section 4.2, no significant health effects are expected to occur as a result of the project. Finally, Section 4.2 imposes requirements for any future residential uses within the Hospital District. The CMH Code is consistent with Chapter 7 of the General Plan.

Mitigation Measures. The proposed Code implements the policies and actions of the 2005 General Plan, and no mitigation is required.

Significance After Mitigation. Impacts would be less than significant without mitigation.



Impact LU-3 The Hospital District is not subject to any habitat or natural community conservation plan. This is a Class III, *less than significant*, impact.

As described in the Biological Resources section of the Initial Study, the Hospital District does not include and is not located near wetland or riparian habitat, native plant or animal communities, or a water body or watercourse. Therefore, there are no unique, rare, threatened, or endangered animal or plant species or critical habitat on the Project Area. The Project Area is not subject to a habitat conservation plan or natural community conservation plan.

Mitigation Measures. No mitigation is required.

Significance After Mitigation. The impact would be less than significant without mitigation.

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4.8 WATER SUPPLY

Public utilities provided by the City include water services, wastewater conveyance and solid waste. Section 4.6, *Hydrology and Water Quality*, addresses potential impacts to storm drain infrastructure and water quality. Wastewater and solid waste are discussed in the Initial Study (Appendix A). This section is based on a water supply assessment prepared for the project pursuant to SB 610. The water supply assessment is contained in Appendix J.

4.13.1 Setting

According to the 2008 Biennial Water Supply Report, the City of Ventura obtains water from the following sources:

1. Ventura River surface and subsurface water intakes and four shallow wells (Foster Park)
2. Casitas Municipal Water District (Casitas)
3. Mound Groundwater Basin
4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
5. Santa Paula Ground Water Basin
6. Saticoy Yard Well

The City also holds a State Water Project entitlement of 10,000 acre-feet per year (AFY). To date, the City has not received delivery of its allotment. In 1998 the City became a signatory to the SWP Monterey Amendment. The amendment allows the City to sell back surplus water to the SWP using a Turn-Back Pool method, which the City has participated in. In 2008, the State allowed one water contractor to sell its surplus SWP water directly to another water contractor (Butte County-Palmdale Agreement). The approval of this agreement has given the City the ability to review its options in short-term sales of its surplus SWP water.

The City manages its water resources conjunctively. Conjunctive use is the practice of first utilizing surface supplies (which are lost to the ocean if not used when they are available) before groundwater supplies (which can be stored for use when the surface supplies are not plentiful). Groundwater is used to provide for seasonal demands and as a source during drought periods. Therefore, the City will generally utilize its water supplies in the following order: Ventura River, Lake Casitas, and groundwater basins. In addition, the City provides reclaimed water from the Ventura Water Reclamation Facility to two municipal golf courses, the Ventura Marina area and private customers for landscape irrigation. The City's Historic and Projected Water Source Supply Availability is shown in Table 4.8-1. The City's current water supply is about 28,000 AFY (Table 4.8-1). The installation of the Saticoy County Yard Well and Saticoy Well #3 will increase redundancy and increase supply by 2,400 acre-feet/year.

Historic water use by the City's population is estimated at 0.22 AF per capita prior to mandatory water conservation measures such as low-flow plumbing fixtures. Following implementation of these measures, per capita annual water usage for the period between 1994 and 2004 is 0.18 AF. Future projected demand within the City based on population growth is shown in Table 4.8-2.

Table 4.8-1
Historic and Projected Water Source Supply Availability (Acre Feet) ¹

Year	Surface Water		Ground Water				Total Water Supply
	Lake Casitas ²	Ventura River ³	Mound Basin ⁴	Oxnard Plain Basin ⁵	Santa Paula Basin ⁶	Saticoy County Yard Well ⁷	
1980	7,544	7,276	0	5,198	2,129	0	22,147
1985	9,099	5,493	2,360	6,172	46	0	23,170
1990	6,175	2,859	4,365	5,749	0	0	19,148
1995	1,622	9,042	2,169	2,603	2,594	0	18,030
2000	5,836	6,779	4,579	2,674	1,698	0	21,566
2001	6,292	5,727	4,030	905	2,006	0	18,960
2002	7,127	5,951	3,721	1,978	1,157	0	19,934
2003	4,912	6,722	5,546	2,898	316	0	20,394
2004	6,833	6,118	4,773	2,391	2,183	0	22,298
2005	7,115	1,293	3,716	4,728	2,046	0	18,898
2006	5,398	2,244	4,102	5,348	1,068	0	18,160
2007	6,649	1,966	3,521	5,314	1,263	0	18,713
2008	8,000	6,700	5,700	4,600	3,000	0	28,000
2013	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2018	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2023 ⁸	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2028 ⁸	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2033 ⁸	8,000	6,700	5,700	4,100	3,000	2,400	29,900

Source: City of San Buenaventura, 2008 Biennial Water Supply Report, Table 1

¹ Includes treated and raw water; excludes reclaimed water supply.

² Lake Casitas is the City's total past supply including raw water and oil users; projected supply is the City's anticipated water availability for in-district use.

³ Ventura River future supply is the average long-term production per the Evaluation of Long Term Alternative Water Sources, James M. Montgomery, June 1993.

⁴ Mound Basin Future supply is 75 percent of well pump capacity within basin.

⁵ Oxnard Plain Basin future supply is based on GMA restricted extraction limits (rounded to nearest 100 AF)

⁶ Santa Paula Basin future water supply is the pumping allocation of the Stipulated Judgement.

⁷ Saticoy County Yard Well supply is 75% of design maximum pump output capacity. The well is located in the Oxnard Forebay Basin.

⁸ Projections for 2023, 2028, and 2033 were not included in the 2008 UWMP; however, to assure a 20-year projection is included in this analysis, water supply is assumed to remain as allocated in the preceding years.

A comparison of the overall supply as indicated in Table 4.8-1 with service area demand as indicated in Table 4.8-2 results in a determination that projected available supplies are adequate to meet projected service area demands (see Table 4.8-3).

Table 4.8-2
Projected Service Area Water Demand (Acre Feet)
(Normal Year, Weatherwise)

Year	Est. Water Service Area Population ¹	Per Capita Usage AFY ²	Treated Water Demand ²	Raw Water Demand ³	Total Water Demand
2008	112,006	0.18	20,161	1,000	21,161
2013	116,920	0.18	21,046	1,000	22,046
2018	122,052	0.18	21,969	1,000	22,969
2023 ⁴	129,744	0.18	23,354	1,000	24,354
2028 ⁴	137,723	0.18	24,790	1,000	25,790
2033	146,193	0.18	26,315	1,000	27,315

Source: Table 4, 2008 Biennial Water Supply Report.

¹ Service Area population from DOF reflecting an average annual growth rate of 0.88% plus a 0.35% average annual growth rate for unincorporated areas that are served by the City's supply and infrastructure (2008 Biennial Water Supply Report).

² Treated water demand is estimated population multiplied by 0.18 AF/capita based on 1994-2007 average post mandatory water conservation per capita use from Table 2, 2008 Biennial Water Supply Report.

³ Raw water demand projections include raw water and oil users. i

⁴ Assumes growth continues at the rate of 0.88% within the City and 0.35% within unincorporated areas served by the City.

Table 4.8-3
Projected Service Area Surplus (AFY)
(Normal Year, Weatherwise)

Year	Projected Supply	Projected Demand	Surplus
2008	28,000	21,161	6,839
2013	29,900	22,046	6,954
2018	29,900	22,969	6,931
2023	29,900	24,354	5,546
2028	29,900	25,790	4,110
2033	29,900	27,315	2,585

The residential sector of the City is comprised of single and multi-family residential customers. Residential uses comprise about 64% of the overall consumption (2005 UWMP). The commercial sector is comprised of gas stations, large shopping complexes, auto dealerships, restaurants, business parks, office buildings, hotels, and hospitals. The commercial sector comprises about 23% of the overall consumption (2005 UWMP). The industrial sector is comprised of the food industry and oil production, both of which constitute about 1% of the City's overall consumption (2005 UWMP). The institutional and governmental sectors are relatively stable and consist of the County Seat offices, a jail complex, City offices and yards as well as school facilities and churches. The institutional and governmental sector comprises about 4% of the overall consumption (2005 UWMP). Landscape, Agricultural and Other uses consist of 34 developed parks and 45 miles of linear parkways. In addition there are two 18-hole tournament class public golf courses served by reclaimed water for all turf areas. Agricultural uses served by the City comprise about 0.46% of the overall consumption, while the entire Landscape, Agricultural and Other sector utilizes about 8% of the total consumption (2005 UWMP).

The projected water supply in years 2008 through 2033 appears adequate to serve the demands of the City pursuant to planned growth increases, consistent with the 2005 General Plan, as the surplus of available water ranges from a low of 2,585 AFY in 2033 to a high of 6,954 AFY in 2013. In drought conditions, water supplies may be reduced as a result of reduced precipitation. The 2005 UWMP evaluated a three-year drought scenario to determine the City's ability to supply water under drought conditions. The City assumed that severe drought conditions (no rain and above average temperatures) would begin immediately and continue for three consecutive years. Planned water sources for fiscal year 2005, reflecting capacity of current facilities were used as an average normal water year base for estimating purposes. It was also assumed that demand would not be reduced in response to the drought conditions. Available water supplies during the three year period were projected considering: 1) the current status of each existing source; and 2) the past response of each existing source to similar drought conditions. The single dry and multiple dry year supply and demand comparisons are shown in Table 4.8-4. Analysis of single dry water year supply vs. projected demand over a 20-year period is shown in Table 4.8-5.

**Table 4.8-4
Single and Multiple Dry Year
Supply Reliability and Demand Comparison (Acre Feet)**

Source	Average/Normal Water Year ¹	Single Dry Water Year ²	Multiple Dry Years		
			Year 1	Year 2	Year 3
Ventura River ³	6,700	2,859	2,859	1,430	700
Casitas ⁴	8,000	7,090	7,090	7,090	4,960
Oxnard Plain GW ⁵	4,600	4,400	4,400	4,400	4,400
Mound Basin GW ⁶	5,700	4,365	4,365	2,838	2,270
Santa Paula GW ⁷	2,600	3,000	3,000	3,000	3,000
Saticoy County Yard Well ⁸	0	1,800	1,800	900	675
Total Source Capacity	27,600	23,514	23,514	19,658	16,005
Less Raw Water Demand ⁹	1,000	1,000	1,000	1,000	1,000
Available Treated Water	26,600	22,514	22,514	18,658	15,005
Total Treated Water Demand ¹⁰	19,766	19,766	19,766	19,937	20,109
Demand Delta	6,834	2,748	2,748	-1,279	-5,104
Banked Groundwater Used ¹¹	0	0	0	1,300	5,120
Surplus Available for Banking ¹²	6,834	2,748	2,748	21	16

Source: Table 6-1, 2005 UWMP

¹ From Table 3-6, 2005 UWMP (See Table 4.8-1). Year 2005 data with adjustment to Ventura River to reflect capacity of current facilities with a full basin.

² Rainfall in 1990 was 5.53 inches, well below the yearly average of 15 inches. For a single dry water year, 1990 historical data is used for the Ventura River and Mound Basin (ref. Table 3-6). Casitas reflects Stage 2 allocation, Oxnard source reflects the future available supply per GMA Ordinance. Santa Paula Basin reflects allocated amount per UWCD agreement and Saticoy Yd Well reflects 75% of average year (see Table 3-8).

³ Ventura River available supply in Year 1 reflects the single dry water year. Year 2 is 50% of Year 1. Year 3 is the worst-case available annual yield per the Comprehensive Water Resources Management Plan.

⁴ Casitas available supply during Year 1 and 2 reflects stage 2 allocation with year 3 reflecting stage 5 allocation.

⁵ Oxnard Plain available supply assumed to be the City's allocation at 80% per GMA Extraction Reductions (Table 3-2).

⁶ Mound Basin available supply for year 1 is assumed to be the single dry water year, decreasing in Year 2 by 35% based on 1990/1991 historical data. Year 3 reflects a 20% decrease of year 2.

⁷ Santa Paula Basin Available supply assumed to be City's allocated amount per agreement with UWCD.

⁸ Saticoy County Yard Well year 1 is assumed to be 75% of average year. Year 2 at 50% of year 1 and year 3 at 75% of year 2.

⁹ From Table 4-4, 2005 UWMP (see Table 4.8-2).

¹⁰ From Table 4-4, 2005 UWMP (see Table 4.8-2). Average and Single Dry Year reflects per capita use of 0.18 to projected 2005 population. The three multiple dry years also reflect 0.18 per capita water uses to extrapolated population estimates. (Population year 1 = 109,812; year 2 = 110,759; year 3 = 111,714).

¹¹ Reduced water demands have allowed the City to store 35,447 AF in the GMA bank at the end of year 2004. The use of banked groundwater would reduce our reserve but allow the City to meet its treated water demand.

¹² Surplus for banking is the lesser of net supply or GMA allocation amount.



**Table 4.8-5
Summary of Projected Single Dry Water Year Demand and Supply
(Five Year Increments in Acre Feet)**

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Single Dry Water Year Supply ³	Difference (Supply-less-demand)
2008	112,006	21,161	25,464	4,303
2013	116,920	22,046	25,464	3,418
2018	122,052	22,969	25,464	2,495
2023	129,744	24,354	25,464	1,110
2028	137,723	25,790	25,464	-326
2033	146,193	27,315	25,464	-1,851

Source: Table 6-2, 2005 UWMP

¹ Projected planning area population is from Table 4.8-4, 2008 Biennial Water Supply Report (see Table 2).

² Projected water demand is from Table 4.8-2.

³ Projected water supply is from Table 6-1, 2005 UWMP (see Table 4.8-4). For a Single Dry Water Year (23,514 a/f) reduced by 300 a/f, per GMA Extraction Requirement. Plus the New Saticoy Well #3 (Ref. Table 3-8, 2005 UWMP - 2,250 a/f).

Table 4.8-6 provides a summary of single dry water years in 5-year increments over twenty years, compared to projected service area water demand.

**Table 4.8-6
Summary of Projected Multiple-Dry Three Year Water Demand and Supply
(Five Year Increments in Acre Feet)**

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Supply Multiple-Dry Water Years ³	Difference (Supply-less-Demand)	Banked Groundwater December 2004	
					Standalone ⁴	CUM ⁵
					35,447	35,447
2008	112,677	21,282	25,764	4,482	39,929	39,929
2009	113,648	21,457	20,783	-674	39,256	39,256
2010	114,629	21,633	16,549	-5,084	34,171	34,171
2013	116,920	22,046	25,464	3,418	38,739	37,464
2014	118,358	22,304	20,483	-1,821	36,868	35,592
2015	119,814	22,567	16,549	-6,018	30,878	29,603
2018	122,052	22,969	25,464	2,495	37,810	31,965
2019	123,553	23,240	20,483	-2,757	35,001	29,157
2020	125,072	23,513	16,549	-6,964	28,066	22,221



Table 4.8-6
Summary of Projected Multiple-Dry Three Year Water Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Supply Multiple-Dry Water Years ³	Difference (Supply-less-Demand)	Banked Groundwater December 2004	
					Standalone ⁴ 35,447	CUM ⁵ 35,447
2023	129,744	24,354	25,464	1,110	36,839	23,613
2024	131,340	24,641	20,483	-4,158	33,051	19,825
2025	132,956	24,932	16,549	-8,383	25,128	11,902
2028	137,723	25,790	25,464	326	35,835	12,290
2029	139,417	26,095	20,483	-5,612	31,034	7,489
2030	141,132	26,404	16,549	-9,855	22,091	-1,454

Source: Table 6-4 (2005 UWMP); data for years 2028 through 2030 was extrapolated based on the average annual growth rate of 0.88% plus a 0.35% average annual growth rate for unincorporated areas that are served by the City's supply and infrastructure (2008 Biennial Water Supply Report).

¹ Projected planning area population is from Table 4-3 (2005 UWMP)

² Projected water demand is estimated population multiplied by 0.18 AF/capita based on 1994-2004 average post mandatory water conservation per capita use from Table 4-1 plus 1,000 AF/yr raw water demand.

³ Projected water supply reflects Total Source Capacity from Table 6-1 (2005 UWMP) Multiple Dry Water Years plus the New Saticoy Well #3 (Ref. Table 6-3). Additionally, 2010 forward reflects Fox Canyon GMA Extraction Requirements (Ref. Table 3-2, 2005 UWMP)

⁴ Each consecutive three year period reflects a standalone snapshot over the next twenty years ending in five year increments. Assumes only one of the three-year drought periods occur. For example if a drought occurred in 2013 through 2015 it is assumed that banked GMA credits would be available to support the water demand delta. As of 2007, the City's banked groundwater was 28,821 a/f.

⁵ Reflects a cumulative reduction of banked groundwater for each five-year period over the next twenty years. This assumes five (5), three-year drought periods occur in the next twenty years. In this example the use of banked GMA credits would reduce the reserve, but allow the City to meet its treated water demand until the year 2030.

As indicated in Table 4.8-6, the existing groundwater banking program would allow the City to draft from the existing banked water, which would meet multiple dry year demands until the year 2030, assuming 5 droughts, each having multiple dry year demands. This scenario assumes that the banked groundwater supply is frozen at the December 2004 supply of 35,447 AF and that groundwater bank contributions do not increase beyond single and multiple dry year banking deposits (maximum of 2,748 AF/Year). However, if normal year groundwater bank deposits occur, such as the 6,834 AF/year surplus (surplus avail. for banking in an Average/Normal Water Year – See Table 4.8-4), banked groundwater supplies would be expected to exceed demand in 2030, indicating no cumulative shortage even with a three-year drought every five years.

4.9.2 Impact Analysis

a. Methodology and Significance Thresholds. The proposed project would have a significant impact on water supplies if demand associated with projected growth exceeds the available supply, thereby causing water shortages during average or peak demand periods. Impacts related to the proposed project would be considered substantial if growth under the



project would:

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);*
- *Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or*
- *Fail to have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.*

As discussed in the Initial Study (Appendix A), implementation of the CMH Code would not be anticipated to substantially deplete the existing groundwater supply or interfere with groundwater recharge. In addition, as discussed in the Initial Study, implementation of the project would not require or result in the construction of new water facilities or expansion of existing facilities. Therefore, impacts to groundwater and construction of new water facilities would be less than significant. Therefore, the discussion below focuses on sufficient water supplies available to serve the project.

b. Project Impacts and Mitigation Measures.

Impact WS-1 **The proposed project would increase water demand, with a net increase of 15.5 acre-feet per year (AFY) during Phase I and a net increase of 12.1 AFY during Phase II, for a total of 27.6 AFY. Projected supplies are sufficient to serve an additional 27.6 AFY through 2030 under normal, single dry and multiple dry year conditions. Therefore, impacts would be Class III, less than significant.**

The proposed Community Memorial Hospital District Development Code facilitates the construction of an imminent project (a replacement hospital building) as well as other probable future development. The CMH Code would facilitate the construction of a new hospital building to house 252 hospital beds, which would essentially absorb the existing 242 beds for a net increase of 10 beds. In addition, the hospital would occupy 121,000 sf of the existing hospital building with non-essential services to support hospital functions, while the remaining 104,000 square feet of the existing hospital would be backfilled with new medical office uses. Other planned Phase I improvements include the construction of a 3,900 square foot retail liner building and construction of street and open space improvements within the Hospital District. Phase II improvements include the probable subsequent construction of an additional 162,950 square feet of new medical office uses in satellite buildings to create a medical services campus. Existing development that would be removed to accommodate new development includes 45,506 square feet of existing medical office uses and four single family residences. Table 4.8-7 shows the projected net increase in water demand associated with the project. As shown in Table 4.8-7, Total Phase I and Phase II development would create demand for about 143 AFY of water. However, because there is 115.4 AFY of existing uses that will be removed, the net increase in demand would be about 27.6 AFY.

Table 4.8-7
Projected Net Increase in Water Demand

Use	Size/Units	Demand Rate	Daily Demand (gpd)	Demand (AFY)
Phase I				
New Hospital	252 beds	406 gpd/bed	102,312	114.7
Hospital Support	121,000 sf	2,664 gpd/acre ¹	7,400	8.3
Medical Office backfill	104,000 sf	2,880 gpd/acre ¹	6,876	7.7
Retail	3,900 sf	2,088 gpd/acre ¹	187	0.2
Subtotal Phase I				130.9
Phase II				
Medical Office	162,950 sf	2,880 gpd/acre ¹	10,774	12.1
Total Phase I and Phase II				112.7
Existing Uses to be Absorbed and Demolished Under Phase I				
Existing Hospital	242 beds	406 gpd/bed	98,252	(110.1)
Existing Medical Office	45,506 sf	2,880 gpd/acre ¹	3,009	(3.4)
Residential	4 SFR	0.18 AFY/person ²	1,671 ³	(1.9)
Subtotal Existing Uses				(115.4)
Net Increase Phase I				15.5
Net Increase Phase II				12.1

Source: Adapted from Jensen Design & Survey, Inc. Community Memorial Hospital Future Developed Water Demand and Sewage Generation July 20, 2010; and Community Memorial Hospital District Development Code EIR, Section 2.0 Project Description, Table 2-4 Existing Development to be Demolished.

Notes:

¹ City of Simi Valley Water Master Plan, Table 3-3, 2/1986

² City of San Buenaventura, 2005 UWMP

³ Assumes 2.6 persons/household pursuant to 2005 General Plan

Though not specifically accounted for as a planned project in the 2005 General Plan, the 522,850 square feet of projected new development (356,000 + 3,900 + 162,950) is within the commercial development projections of 2,655,000 square feet analyzed within the 2005 General Plan EIR and generally represents about 20% of the overall future commercial development through 2025. However, the Phase II development is not imminent in that there are no applicants for this development as of now. Thus, in the short term, the Phase I net increase in water demand will be about 15.5 AFY, while the longer term net increase in Phase II development is estimated at 12.1 AFY. The total overall increase of 27.6 AFY does not exceed normal year surplus indicated in Table 4.8-3. Normal year surplus, even with an additional demand of 27.6 AFY would be 2,557 AF in 2030 (see Table 4.8-3).

As shown in Table 4.8-4, under single dry year conditions, assuming 27.6 AF of water is removed from the 2,748 AF surplus that would be available for banking, 2,720 AF would still be available for banking. Under multiple dry year conditions, banked groundwater would be necessary to serve the project. As shown in Table 4.8-6, banked groundwater is sufficient to meet the City's needs until 2030, at which time a shortage would occur pursuant to the analysis



assumptions. However, the analysis assumptions are conservative in assuming 5 droughts over a 20 year period, each having multiple dry year demands. Moreover, the scenario assumes that the banked groundwater supply is frozen at the December 2004 supply of 35,447 AF and that groundwater bank contributions do not increase beyond single and multiple dry year banking deposits (maximum of 2,748 AF/Year). However, if normal year groundwater bank deposits occur, such as the 6,834 AF/year surplus (surplus avail. for banking in an Average/Normal Water Year – See Table 4.8-4), banked groundwater supplies would be expected to exceed demand in 2030, indicating no cumulative shortage even with a three-year drought every five years. Thus, projected supplies are sufficient to serve an additional 27.6 AFY through 2030 under normal, single dry and multiple dry year conditions.

Lastly, the project includes a number of features that will serve to reduce consumption by the new hospital, which comprises about 75% of the overall demand within the District. As documented in Section 2.0, *Project Description*, the Project is being designed to achieve credits related to the following water conservation techniques under the Green Guide to Healthcare Program.

- WE1 Non-potable water for equipment cooling
- WE2.1 Water use measurement (separate meters for different uses)
- WE2.2 Motion sensor valves in patient sinks and public toilets
- WE2.5 Condensate reuse

The above measures would contribute to increased water conservation and reduced water demand through reuse of mechanical cooling waters, awareness of demand by metering specific uses, and motion sensors that would respond directly to needs of people.

Because available supplies would be sufficient to serve the anticipated demand within the Plan Area, impacts would be less than significant.

Mitigation Measures. Impacts would be less than significant without mitigation.

c. Cumulative Impacts. The above discussions account for cumulative development associated with buildout under the 2005 General Plan. As discussed above, even when considering the project in addition to growth envisioned in the 2005 General Plan, water supplies are adequate to serve projected future demands through a 20-year planning horizon in normal, single-dry and multiple dry years. Thus, the cumulative impacts are less than significant.

4.9 GREENHOUSE GAS EMISSIONS

This section addresses impacts related to greenhouse gas emissions and global climate change.

4.9.1 Setting

a. Global Climate Change. Global climate change (GCC) is a change in the average weather that is measured by temperature, wind patterns, precipitation, and storms over a long period of time. The baseline, against which these changes are measured, originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed an unprecedented acceleration in the rate of warming during the past 150 years.

GCC is a documented effect. Although the degree to which the change is caused by anthropogenic (man-made) sources is still under study, the increase in warming has coincided with the global Industrial Revolution, which has seen the widespread reduction of forests to accommodate urban centers and agriculture and the use of fossil fuels, primarily burning of coal, oil, and natural gas for energy. Per the United Nations Intergovernmental Panel on Climate Change (IPCC, 2007), the understanding of anthropogenic warming and cooling influences on climate has led to a very high confidence (90% or greater chance) that the global average net effect of human activities since 1750 has been one of warming. Most of the observed increase in global average temperatures, since the mid-20th century, is very likely due to the observed increase in anthropogenic greenhouse gas concentrations per the IPCC (November 2007). While some individual scientists disagree with some of the findings of the IPCC, the overwhelming majority of scientists working on climate change agree with the main conclusions, as do the vast majority of major scientific societies and national academies of science. Disagreement within the scientific community is always present for all issues; however, the current state of knowledge suggests that GCC is occurring, with eleven of the last twelve years (1995-2006) ranking among the twelve warmest years in the instrumental record of global surface temperature since 1850 (IPCC, 2007). In addition, the majority of scientists agree that anthropogenic sources are a main, if not primary, contributor to the GCC warming.

5.3.1 Greenhouse Gases (GHGs)

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG), analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O_x), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur

hexafluoride (SF₆) (Cal EPA, 2006b).

The accumulation of GHGs in the atmosphere regulates Earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (CAT, 2006). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The following discusses the primary GHGs of concern.

Carbon Dioxide. The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO₂ are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (USEPA, April 2008). CO₂ was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements being made in the last half of the 20th century. Concentrations of CO₂ in the atmosphere have risen approximately 35%, since the Industrial Revolution. Per the IPCC (2007), the global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 parts per million (ppm) to 379 ppm in 2005. The atmospheric concentration of CO₂ in 2005 exceeds the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores. The average annual carbon dioxide concentration growth rate was larger during the last 10 years (1995–2005 average: 1.9 ppm per year) than it has been since the beginning of continuous direct atmospheric measurements (1960–2005 average: 1.4 ppm per year), although there is year-to-year variability in growth rates.

Methane. CH₄ is an effective absorber of radiation, though its atmospheric concentration is less than that of CO₂ and its lifetime in the atmosphere is limited to 10–12 years. It is approximately 20 times more effective at trapping heat in the atmosphere than CO₂ (global warming potential [GWP] 20x that of CO₂). Over the last 250 years, the concentration of CH₄ in the atmosphere increased by 148% (IPCC 2007). Anthropogenic sources of CH₄ include landfills, natural gas and petroleum systems, agricultural activities, coal mining, wastewater treatment, stationary and mobile combustion, and certain industrial processes (USEPA, April 2008).

Nitrous Oxide. Concentrations of nitrous oxide (N₂O) also began to rise at the beginning of the industrial revolution. N₂O is produced by microbial processes in soil and water, including those reactions which occur in fertilizers that contain nitrogen. Use of these fertilizers has increased over the last century. N₂O's GWP is 300 times that of CO₂.

Fluorinated Gases (HFCS, PFCS and SF₆). Fluorinated gases, such as HFCs, PFCs and SF₆, are greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances, such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and are phased out under the *Montreal Protocol* and Clean Air Act Amendments of 1990. Fluorinated gases are typically emitted in smaller quantities than CO₂, CH₄, and N₂O, but each molecule can have a much greater global warming effect. SF₆ is the most potent greenhouse gas that the IPCC has evaluated.

5.3.2 Greenhouse Gas Inventory

Worldwide anthropogenic emissions of GHGs were approximately 40,000 million metric tons of carbon dioxide equivalent (CDE¹), including ongoing emissions from industrial and agricultural sources, but excluding emissions from land use changes (i.e., deforestation, biomass decay) (IPCC, 2007). CO₂ emissions from fossil fuel use accounts for 56.6% of the total emissions of 49,000 million metric tons CDE (includes land use changes) and all CO₂ emissions are 76.7% of the total. Methane emissions account for 14.3% and N₂O emissions for 7.9% of GHGs (IPCC, 2007).

Total U.S. GHG emissions were estimated at 7,054 million metric tons CDE in 2006 (USEPA, April 2008), or about 14% of worldwide GHG emissions. U.S. emissions rose by 14.7% from 1990 to 2006, while emissions fell by 1.1% from 2005 to 2006 (75.7 MMT CDE). The following factors were primary contributors to this decrease: (1) compared to 2005, 2006 had warmer winter conditions, which reduced consumption of heating fuels, as well as cooler summer conditions, which reduced demand for electricity; (2) restraint on fuel consumption caused by rising fuel prices, primarily in the transportation sector; and (3) increased use of natural gas and renewables in the electric power sector.

The primary GHG emitted by human activities in the United States is CO₂, representing an estimated 84.8% of total GHG emissions (USEPA, April 2008). The largest source of CO₂, and of overall greenhouse gas emissions, was fossil fuel combustion. CH₄ emissions, which have declined from 1990 levels, resulted primarily from enteric fermentation associated with domestic livestock, decomposition of wastes in landfills, and natural gas systems. Agricultural soil management and mobile source fossil fuel combustion were the major sources of N₂O emissions. The emissions of substitutes for ozone depleting substances and emissions of HFC-23 during the production of HCFC-22 are the primary contributors to aggregate HFC emissions. Electrical transmission and distribution systems account for most SF₆ emissions, while PFC emissions result from semiconductor manufacturing and as a by-product of primary aluminum production.

The residential and commercial end-use sectors accounted for 20% and 18%, respectively, of CO₂ emissions from fossil fuel combustion in 2006 (USEPA, April 2008). Both sectors relied heavily on electricity to meet energy demands, with 72% and 79%, respectively, of their emissions attributable to electricity consumption for lighting, heating, cooling, and operating appliances. The remaining emissions were due to the consumption of natural gas and petroleum for heating and cooking.

California is the second largest contributor in the United States among states and if California were a country, it would be the sixteenth largest contributor among countries (AEP, 2007). Based upon the 2004 GHG inventory data (the latest year available) compiled by the California Energy Commission (CEC, December 2006), California produced 492 MMT CDE (7% of US total). The major source of GHGs in California is transportation, contributing 41% of the state's total GHG emissions. Electricity generation is the second largest source, contributing 22% of the state's GHG emissions (CEC, December 2006). Most (81%) of California's 2004 GHG emissions (in terms of CDE) were carbon dioxide produced from fossil fuel combustion, with 2.8% from other sources of CO₂, 5.7% from methane, and 6.8% from nitrous oxide (CEC, December 2006). California

¹ Carbon dioxide equivalent (CDE or CO₂E) is a quantity that describes, for a given mixture and amount of GHGs, the amount of CO₂ (usually in metric tons; million metric tons [megatonne] = MMTCO₂E = terragram [Tg] CO₂ Eq; 1,000 MMT = gigatonne) that would have the same global warming potential (GWP) when measured over a specified timescale (generally, 100 years).

emissions are due in part to its large size and large population. By contrast, California had the fourth lowest CO₂ emissions per capita from fossil fuel combustion in the country in 2001, due to the success of its energy-efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise (CEC, December 2006). Another factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its mild climate compared to that of many other states.

5.3.3 Effects of Global Climate Change

GCC has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions, at or above current rates, would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place, including substantial ice loss in the Arctic (IPCC, 2007).

According to the California Air Resources Board (CARB), potential impacts of global warming in California may include loss in snow pack, sea level rise, more extreme heat days per year, an increase in high ozone days, large forest fires, and drought years (CARB 2006c, 2007c). Below is a summary of some of the potential effects reported by an array of studies that could be experienced in California as a result of global warming and climate change.

Air Quality. Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CEC, February 2006).

Water Supply. Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain, until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change" (Climate Change and California Water Resources). For example, some studies identify little change in total annual precipitation in projections for California (California Climate Change Center, 2006). Other studies show significantly more precipitation (Climate Change and California Water Resources [(DWR 2006)]). Even assuming that climate change leads to long-term increases in precipitation, analysis of the impact of climate change is further complicated by the fact that no studies have identified or quantified the runoff impacts that such an increase in precipitation would have in particular watersheds (California Climate Change Center, 2006). Also, little is known about how groundwater recharge and water quality will be affected (Id.). Higher rainfall could lead

to greater groundwater recharge, although reductions in spring runoff and higher evapotranspiration could reduce the amount of water available for recharge (Ibid.).

The California Department of Water Resources (DWR 2006) report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta concludes that “[c]limate change will likely have a significant effect on California’s future water resources... [and] future water demand.” DWR also reports that “much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain” (DWR, 2006).

This uncertainty serves to complicate the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood (DWR, 2006). DWR adds that “[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future.” Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows (Kiparsky 2003; DWR 2005; Cayan 2006, Cayan, D., et al, 2006).

Hydrology. As discussed above, climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise may be a product of global warming through two main processes: expansion of sea water as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California’s water supply. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture. California has a \$30 billion agricultural industry that produces half the country’s fruits and vegetables. Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year conducive to certain crops, such as wine grapes, bloom or ripen; and thus affect their quality (CCCC, 2006).

Ecosystems and Wildlife. Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise as discussed previously: 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next century, with substantial regional variation (EPA 2000). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as two feet along most of the U.S. coast. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species’ composition within communities;

and (4) ecosystem processes, such as carbon cycling and storage (Parmesan, 2004; Parmesan, C. and H. Galbraith 2004.)

5.3.4 Regulatory Setting

International and Federal. The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC), since it was signed on March 21, 1994. The Kyoto Protocol is a treaty, made under the UNFCCC, and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated 5% from 1990 levels during the first commitment period of 2008–2012. Although the United States is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the United States has not bound itself to the Protocol's commitments (UNFCCC, 2007).

The United States is currently using a voluntary and incentive-based approach toward emissions reductions in lieu of the Kyoto Protocol's mandatory framework. The Climate Change Technology Program (CCTP) is a multi-agency research and development coordination effort (which is led by the Secretaries of Energy and Commerce) that is charged with carrying out the President's National Climate Change Technology Initiative (CCTP, December 2007; <http://www.epa.gov/climatechange/policy/cctp.html>).

To date, the United States Environmental Protection Agency (USEPA) has not regulated GHGs under the Clean Air Act; however, the U.S. Supreme Court in *Massachusetts v. EPA* (April 2, 2007) held that the USEPA can, and should, consider regulating motor-vehicle GHG emissions. The USEPA has not yet promulgated federal regulations limiting GHG emissions. In December 2007, the USEPA also denied California's request for a waiver to directly limit GHG tailpipe emissions, which prompted a suit by California in January 2008 to overturn that decision.

California Regulations. Assembly Bill (AB) 1493, requiring the development and adoption of regulations to achieve "the maximum feasible reduction of greenhouse gases", emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State was signed into law in September 2002. Executive Order S-3-05 was issued in 2005, establishing statewide GHG emissions reduction targets. S-3-05 provides that by 2020, emissions shall be reduced to 1990 levels and by 2050, emissions shall be reduced to 80% of 1990 levels (CalEPA, 2006a).

AB 32, the "California Global Warming Solutions Act of 2006," was signed into law in the fall of 2006. AB 32 required the CARB to adopt regulations to require reporting and verification of statewide GHG emissions. In 2008 CARB produced a Climate Change Scoping Plan that indicates how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms, and other actions. Additionally, the CARB plan outlines a comprehensive plan to reduce GHG emissions to 1990 emission levels by 2020 (essentially a 25% reduction below 2005 emission levels; same requirement as under S-3-05). Additionally, the bill requires the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions.

Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. In addition, a Low Carbon Fuel Standard ("LCFS") for transportation fuels is to be established for California.

In response to EO S-3-05, the CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report"). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the targets are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

In response to the requirements of AB 32, CARB produced a list of 37 early actions for reducing GHG emissions in June 2007. In October 2007, CARB expanded this list to 44 measures that have the potential to reduce GHG emissions by at least 42 million metric tons of CO₂ emissions by 2020. After completing a comprehensive review and update process, the CARB has approved a 1990 statewide GHG level and 2020 limit of 427 MMT CDE. CARB developed the 2020 target after extensive technical work and a series of stakeholder meetings. The 2020 target of 427 MMT requires the reduction of 169 MMT, or approximately 30 percent, from the state's projected 2020 emissions of 596 MMTCO₂E (business-as-usual) and the reduction of 42 MMTCO₂E, or almost 10 percent, from 2002-2004 average emissions. For more information on the Assembly Bills and Executive Orders identified above, and to view reports and research referenced above, please refer to the following websites:
www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

Regulations and CEQA Requirements. GHG emissions and their contribution to GCC have only recently been addressed in CEQA documents, such that CEQA and case law does not provide guidance relative to their assessment. Significance thresholds, quantitative or otherwise have not been adopted by the Ventura County Air Pollution Control District (APCD) or the City of Ventura.

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and GCC impacts. In addition, in an effort to guide professional planners, land use officials and CEQA practitioners, OPR prepared *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA)*. This document offers informal guidance regarding the steps lead agencies should take to address climate change in CEQA documents. This guidance was developed in cooperation with the Resources Agency, Cal EPA, and the CARB.

5.3.5 Climate Change Impact Analysis

The information provided in this section is based on recently established California goals for reducing GHG emissions, as well as a project-specific emissions inventory developed for the proposed project. How a proposed project might contribute to GCC and the overall effect of an individual project based on that contribution are still being debated. As previously discussed, no statewide thresholds or methodologies for determining the significance of a project's potential cumulative contribution to GCC have been adopted to date. An individual project (unless it is a massive construction project, such as a dam or a new freeway project, or a large fossil-fuel fired power plant) does not generate sufficient GHG emissions to directly influence GCC; therefore, the issue of global climate change typically involves an analysis of whether a project's contribution towards a cumulative impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Methodology. This analysis is based on (1) the methodologies recommended by the California Air Pollution Control Officers Association [CAPCOA] (January 2008) *CEQA and Climate Change* white paper and (2) consistency with the goals, strategies, and control measures established by AB 32 and associated guidance documents, including the 2006 Climate Action Team's report, the 2008 OPR guidance strategies, the CEQA Guidelines energy conservation measures, and the Green Guide for Health Care Program.

The Quantitative Threshold. CAPCOA's tiered approach, discussed below, is one of several discussed in their white paper, none of which are mandated by statute or regulation. The CAPCOA white paper was prepared "as a resource, not a guidance document. It is not intended, and should not be interpreted, to dictate the manner in which an air district or lead agency chooses to address greenhouse gas emissions in the context of its review of projects under CEQA." Furthermore, *CEQA Guidelines* Section 15064.4 expressly provides that a "lead agency shall have discretion to determine, in the context of a particular project," whether to "[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." A lead agency also has discretion under the *CEQA Guidelines* to "[r]ely on a qualitative analysis or [quantitative] performance based standards."

In its 2008 white paper, CAPCOA conducted an analysis of various approaches and significance thresholds that a lead agency could choose to adopt. A zero threshold approach could be considered based on the concept that climate change is a global phenomenon in that all GHG emissions generated throughout the Earth contribute to it, and not controlling small source emissions would potentially neglect a major portion of the GHG inventory. However, the *CEQA Guidelines* also recognize that there may be a point where a project's contribution, although above zero, would not be a considerable contribution to the cumulative impact (*CEQA Guidelines*, Section 15130 (a)). Therefore, a threshold of greater than zero is considered more appropriate for the analysis of GHG emissions under CEQA.

CAPCOA' white paper also included a "tiered" approach to analyzing a project's impacts on climate change. Under this "tiered" approach, a lead agency would "establish different levels at which to determine if a project would have a significant impact. The tiers could be established

based on the gross GHG emission estimates for a project or could be based on the physical size and characteristics of the project. This approach would then prescribe a set of GHG mitigation strategies that would have to be incorporated into the project in order for the project to be considered less than significant.” The following discussion relies upon the tiered approach. The first step in the “tiered” approach requires consideration of whether a project is consistent with a qualifying “green list” (a listing of projects that make “a positive contribution to California efforts to reduce GHG emissions”) or a general plan or regional plan that has already been determined to reduce GHG emissions consistent with AB 32.

If a project is not encompassed by a plan in the first step, the second step in the “tiered” approach is to determine whether a project is above or below a quantitative threshold. Possible quantitative thresholds were set forth ranging from a 900 metric tons CDE per year to 40,000 – 50,000 metric tons CDE per year. CAPCOA also includes thresholds based not on emissions output (in metric tons) but on project size (in square feet and by land use). Each is listed in Table 4.9-1 below.

Table 4.9-1
CAPCOA Suggested Thresholds for Greenhouse Gases

Quantitative (900 tons)	~900 tons CDE/year
Quantitative CARB Reporting Threshold/Cap and Trade	Report: 25,000 tons CDE/year Cap and Trade: 10,000 tons CDE/year
Quantitative Regulated Inventory Capture	~40,000 - 50,000 tons CDE/year
Qualitative Unit-Based Threshold	Commercial space > 50,000 sf
Statewide, Regional or Area-wide (CEQA Guidelines 15206(b)).	Office Space > 250,000 sf

*sf = square feet

Sources: California Air Pollution Control Officers Association (CAPCOA), CEQA & Climate Change, January 2008.

The lowest threshold, based on a market capture theory that requires mitigation for greater than 90% of likely future discretionary development, would use a quantitative threshold of greater than 900 metric tons CDE/year for most projects, which would generally correspond to office projects of approximately 35,000 square feet, retail projects of approximately 11,000 square feet, or supermarket space of approximately 6,300 square feet. Similarly, a unit-based market capture approach (focused on a project’s square feet rather than metric tons of emissions) discussed by CAPCOA would again try to capture 90% of future discretionary projects. CAPCOA discusses a 50,000 sq. ft. threshold for commercial development that would roughly correspond to the 900 metric ton threshold.

The conclusions in this section do not result from either of the two market capture thresholds. As CAPCOA’s white paper notes, there is often a large variance between projects and their characteristics such that unit-based measures (square feet here) cannot accurately determine

whether a project will have a significant impact on global climate change. While the 900 metric ton threshold deals with this concern, the threshold will, like a zero threshold, capture projects that do not have a considerable contribution to the cumulative impact.

The conclusions in this section also do not rely upon the CARB reporting threshold discussed in the white paper. This threshold of 25,000 metric tons is based on CARB regulations requiring mandatory reporting of emissions from industrial facilities such as cement plants, oil refineries, hydrogen plants, and other stationary sources. The 25,000 metric ton threshold is designed to cause the reporting of 94 percent of emissions associated with these stationary sources. However, because (A) the CMH Code and proposed hospital are not industrial or stationary sources like a cement plant or oil refinery, and (B) this threshold is based on a reporting objective and not necessarily determinative of the significance of the environmental effect, this threshold is not appropriate for this project. Similarly, another potential threshold of 10,000 metric tons was considered by the Market Advisory Committee for inclusion as it determines the eligibility of an entity to participate in a GHG Cap and Trade System in California. For the same reasons, that threshold does not adequately correspond to the CMH Code, which is not a single stationary source that would be subject to a cap and trade program.

The CAPCOA white paper also discusses a threshold based on unit numbers that attempt to capture projects that are regionally significant pursuant to CEQA Guidelines Section 15206. That threshold would apply to office projects greater than 250,000 sf. Because the CMH Code is not a regionally significant project, and, as noted above, because thresholds based on units are inherently inaccurate given the variances between project types and associated GHG emissions, this threshold is not utilized. It is also worth noting that thresholds based on square feet are particularly inappropriate for the hospital expansion because the expansion, while adding square feet, is not significantly expanding the services or capacity of the hospital. For the same reasons that impacts are measured by the net increase in beds rather than the net increase in square feet, reliance upon a unit-based threshold would not accurately reflect the CMH Code's GHG emissions impacts.

The remaining threshold discussed in the CAPCOA white paper analogizes GHG emissions to the emissions of ozone precursors such as NO_x and ROG. The white paper notes that the "historical management of ozone nonattainment issues in urbanized air districts is somewhat analogous to today's concerns with greenhouse gas emissions in that regional ozone concentrations are a cumulative air quality problem caused by relatively small amounts of NO_x and ROG emissions from thousands of individual sources, none of which emits enough by themselves to cause elevated ozone concentrations. Those same conditions apply to global climate change where the environmental problem is caused by emissions from a countless number of individual sources, none of which is large enough by itself to cause the problem. Because establishment of NO_x/ROG emissions CEQA significance thresholds has been a well-tested mechanism to ensure that individual projects address cumulative impacts and to force individual projects to reduce emissions under CEQA, this threshold presumes the analogy of NO_x/ROG emission thresholds could be used to develop similar GHG thresholds." The ozone precursor threshold is the most analogous to the GHG emissions analysis and the most appropriate to consider the climate change impacts of the CMH Code.

To reach the numeric thresholds under the zone precursor analogy, the white paper evaluated the total inventory of ozone precursors such as NO_x and ROG emissions and determined what percentage of that inventory corresponded to a significance threshold for the ozone precursors. Examining agencies that have utilized this approach, CAPCOA determined that this methodology generally results in a GHG emissions threshold between approximately 40,000 to 50,000 metric tons per year. The CMH Code will be analyzed under that numeric threshold.

The third step in CAPCOA's "tiered" approach is to identify mitigation measures for projects that will produce GHG emissions above the selected significance threshold. These projects are subject to mitigation that correspond with the project's impacts. For example, all projects should, according to CAPCOA, be subject to "Level 1" mitigation measures regardless of CEQA. Level 1 mitigation measures include transit stops for planned routes, Energy Star appliances, Title 24 compliance, and water use efficiency measures. If a project is above a threshold, however, it must also utilize "Level 2" mitigation measures, which may include LEED Silver or Gold Certification, the exceedance of Title 24 building standards by 20 percent, and Traffic Demand Management (TDM) measures. If further mitigation is necessary to reduce emissions to below threshold levels, "Level 3" mitigation measures should be implemented according to CAPCOA. Level 3 measures include on-site renewable energy systems, LEED Platinum certification, exceedance of Title 24 building requirements by 40 percent, required recycled water use for irrigation, and zero waste/high recycling requirements.

To determine whether the CMH Code will exceed the CAPCOA threshold described above, calculations of CO₂, CH₄, and N₂O are provided below for full disclosure of the magnitude of potential project effects. The analysis focuses on CO₂, N₂O, and CH₄ as GHG emissions that the project would emit in the largest quantities, as compared to other GHGs (such as chlorofluorocarbons [CFCs]). Calculations were based on the methodologies discussed in the CAPCOA white paper (January 2008) and included the use of the California Climate Action Registry General Reporting Protocol (March 2007).

Construction-related Emissions. While construction-related GHG emissions are temporary in nature and not analyzed under the CAPCOA thresholds of significance, a quantification of construction-related emissions is provided for informational purposes. Emissions associated with construction were estimated using the California Air Resources Board's URBEMIS 2007 (Version 9.2.4) computer model and the California Climate Action Registry General Reporting Protocol (March 2007).

Emissions from Electricity Consumption. Operational emissions of CO₂ associated with space heating and landscape maintenance were quantified using the CARB's URBEMIS 2007 (version 9.2.4) computer model based on default characteristics for hospital operations. N₂O and CH₄ emissions were quantified using the California Climate Action Registry General Reporting Protocol (March 2007) emission factors for electricity use (see Appendix C for calculations). The calculations and emission factors contained in the General Reporting Protocol were selected based on technical advice provided to the Registry by the California Energy Commission. This methodology is considered reasonable and reliable for use as it has been subjected to peer review by numerous public and private stakeholders, in particular the California Energy Commission, and is recommended by CAPCOA (January 2008).

Direct Emissions from Mobile Combustion. Emissions of CO₂ from transportation sources were quantified using the CARB's URBEMIS 2007 (version 9.2.4) computer model. N₂O and CH₄ emissions were quantified using the California Climate Action Registry General Reporting Protocol (March 2007) direct emission factors for mobile combustion (see Appendix C for calculations). Total daily mileage was calculated in URBEMIS 2007 and extrapolated to derive total annual mileage. Emission rates were based on the vehicle mix output, generated by URBEMIS, and emission factors found in the California Climate Action Registry General Reporting Protocol.

It should be noted that one of the limitations to a quantitative analysis is that emission models, such as URBEMIS, evaluate aggregate emissions and do not demonstrate, with respect to a global impact, what proportion of these emissions are "new" emissions, specifically attributable to the proposed project in question. For most projects, the main contribution of GHG emissions is from motor vehicles and the total vehicle miles traveled (VMT), but the quantity of these emissions appropriately characterized as "new" is uncertain. Traffic associated with a project may be relocated trips from other locales, and consequently, may result in either a higher or lower net VMT. In this instance, it is likely that some of the proposed project-related GHG emissions, associated with traffic and energy demand, would be truly "new" emissions; but, it is also likely that some of the emissions represent diversion of emissions from other locations. Thus, although GHG emissions are associated with the project, it is not possible to discern how much diversion is occurring or what fraction of those emissions represent global increases. In the absence of information regarding the types of trips, the VMT generated by URBEMIS is used as a conservative, worst-case estimate.

Consistency with CAT Report Strategies, OPR Guidance, CEQA Guidelines, and the Green Guide for Health Care. As discussed above, the Climate Action Team, established by Executive Order S-3-05, has recommended strategies to reduce GHG emissions at a statewide level to meet the goals of the Executive Order. Similarly, the Office of Planning and Research published a guidance document regarding the analysis of GHG emissions in CEQA documents. Additionally, Appendix F to the CEQA Guidelines provides energy conservation measures which in turn reduce GHG emissions. A consistency analysis is provided for those measures as well. Finally, the hospital's compliance with the Green Guide for Health Care, a guide containing requirements similar to LEED that can be utilized for the hospital, is discussed. This section analyzes the impacts of the CMH Code by considering whether and how the Code is consistent with the goals and strategies contained in the four listed documents. The first three documents are analyzed in light of the entire project (Phases I and II of the CMH Code). The Green Guide for Health Care is analyzed against the first phase since, at this time, only the proposed hospital expansion is registered with the Green Guide program.

Impact GCC-1 **Development of Phase I and II under the CMH Code would generate GHG emissions; however, the emissions would not exceed the City's selected numeric significance threshold, derived from the January 2008 CAPCOA white paper. To further reduce GHG emissions, the project would include CAPCOA's Level 1 mitigation measures. The project's impacts on global climate change would be Class III, less than significant.**

Estimate of GHG Emissions. The project's sources of GHG emissions are discussed below along with the quantification of each source's emissions.

Construction-Related Emissions. Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site grading typically generates the greatest amount of emissions due to the use of grading equipment and soil hauling. Emissions associated with construction were estimated using the California Air Resources Board's URBEMIS 2007 (Version 9.2.4) computer model and the California Climate Action Registry General Reporting Protocol (March 2007).

As discussed in Section 2.0, *Project Description*, Phase I would occur from 2010 to 2014 and Phase II would occur over a period of years. For a conservative estimate, it was assumed that construction activities would occur for approximately 260 days during each year of construction. The average CO₂ generated during construction would be 2,174 pounds per day (derived from URBEMIS 2007 version 9.2.4 computer model results). Assuming the average pounds of CO₂ per day during the construction period (260 days per year), construction activity would generate an estimated 256 metric tons of carbon dioxide equivalent (CDE) units per year at the project site, as shown in Table 4.9-2.

**Table 4.9-2
 Estimated Annual Construction Emissions
 of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂ *	282.62 tons (short, US)	256 metric tons
CH ₄	N/A	0.00 metric tons
N ₂ O	N/A	0.00 metric tons
Total		256 metric tons

* CO₂ emission estimates are partially based on the URBEMIS model (see Appendix C)

CDE = carbon dioxide equivalents

Calculation Methodology per 30, Version 2.2, March 2007, pages 30-35.

See Appendix C for GHG emission factor assumptions.

N/A = Emissions generated for methane and nitrous oxide are not estimated by the URBEMIS model and are therefore not available.

Operational Indirect and Stationary Direct Emissions. Phase I of the Project would include a 10-bed increase in the Hospital, 104,000 square feet of medical office reuse within the old hospital, and 3,900 square feet of retail development. For the purposes of modeling, since the existing hospital is already operational, reuse of the old hospital was omitted from the emissions calculations. Such development would consume an estimated net increase of 8,200,544 kilowatt-hours [kWh]/year of electricity during Phase I (see Table 4.9-3). Phase II would include construction of an additional 162,950 sf of medical office space and construction of a 570 space parking garage. However, because there are currently 45,506 sf of existing use that would be demolished, the net increase would be 117,444 sf of medical office use. Phase II

development would generate demand for a net increase of 2,024,100 kilowatt-hours [kWh]/year of electricity (see Table 4.9-4).

Table 4.9-3
Phase I Estimated Electricity Consumption

Use	Square Feet	Electricity Demand Factor ¹	Annual Electricity Demand (kWH/year)
Retail	3,900	14.3 kWH/sf/year	55,770
Hospital	355,667	22.9 kWH/sf/year	8,144,774
Phase I Total			8,200,544

sf = square feet kWH = kilowatt hour

¹ Generation Factor Source: Energy Information Administration, 2008. 2003 CBECS Detailed Tables

Medical office reuse not included in electricity calculations, because the existing space is occupied and currently draws electricity.

Table 4.9-4
Phase II Estimated Electricity Consumption

Use	Square Feet	Electricity Demand Factor ¹	Annual Electricity Demand (kWH/year)
Medical Office	117,000	17.3 kWH/sf/year	2,819,035
Phase II Total			2,024,100

sf = square feet kWH = kilowatt hour

¹ Generation Factor Source: Energy Information Administration, 2008. 2003 CBECS Detailed Tables

The generation of electricity through combustion of fossil fuels typically yields CO₂, and to a lesser extent N₂O and CH₄. As discussed above, annual electricity emissions can be calculated using the California Climate Action Registry General Reporting Protocol, which has developed emission factors based on the mix of fossil-fueled generation plants, hydroelectric power generation, nuclear power generation, and alternative energy sources associated with the regional grid. CO₂ emission estimates using the URBEMIS model also take into account emissions from other operational sources such as natural gas use for space heating. Tables 4.9-5 and 4.9-6 show the operational emissions of GHGs associated with electricity consumption due to Phase I and Phase II development.

Transportation Emissions. Mobile source GHG emissions were estimated using the average daily trips estimate generated by the traffic report and the total vehicle miles traveled estimated in URBEMIS 2007 (v. 9.2.4). The URBEMIS 2007 model estimates that Phase I development would generate approximately 30,361 daily VMT and that Phase II development would generate approximately 31,825 VMT. Tables 4.9-7 and 4.9-8 show the estimated

emissions of GHGs that would result from the increase in VMT associated with development under Phases I and II.

**Table 4.9-5
Phase I Estimated Annual Operational Emissions
of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂ *	3,299 tons (short, US)	2,993 metric tons
CH ₄	0.03 metric tons	0.6 metric tons
N ₂ O	0.01 metric tons	4.1 metric tons
Total		3,153 metric tons

* CO₂ emission estimates are partially based on the URBEMIS model (see Appendix C), which also take into account emissions from other operational sources, such as natural gas used for space heating.
CDE = carbon dioxide equivalents
Calculation Methodology per 30, Version 2.2, March 2007, pages 30-35.
See Appendix C for GHG emission factor assumptions.

**Table 4.9-6
Phase II Estimated Annual Operational Emissions
of Greenhouse Gases**

Source	Annual Emissions	
	Emissions	CDE
CO ₂ *	814 tons (short, US)	739 metric tons
CH ₄	0.01 metric tons	0.1 metric tons
N ₂ O	0.0 metric tons	1.0 metric tons
Total		895 metric tons

* CO₂ emission estimates are partially based on the URBEMIS model (see Appendix C), which also take into account emissions from other operational sources, such as natural gas used for space heating.
CDE = carbon dioxide equivalents
Calculation Methodology per 30, Version 2.2, March 2007, pages 30-35.
See Appendix C for GHG emission factor assumptions.

Table 4.9-7
Phase I Estimated Annual Mobile Emissions of Greenhouse Gases

Source	Annual Emissions	
	Emissions	CDE
CO ₂	5,162 tons (short, US)	4,683 metric tons
CH ₄	4.7 metric tons	107 metric tons
N ₂ O	5.1 metric tons	1,517 metric tons
Total		6,307 metric tons

CDE = carbon dioxide equivalents

Calculation Methodology per California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007, pages 30-35. See Appendix C for GHG emission factor assumptions.

Table 4.9-8
Phase II Estimated Annual Mobile Emissions of Greenhouse Gases

Source	Annual Emissions	
	Emissions	CDE
CO ₂	5,410 tons (short, US)	4,908 metric tons
CH ₄	4.9 metric tons	112 metric tons
N ₂ O	5.4 metric tons	1,590 metric tons
Total		6,610 metric tons

CDE = carbon dioxide equivalents

Calculation Methodology per California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007, pages 30-35. See Appendix C for GHG emission factor assumptions.

Combined Stationary and Mobile Source Emissions. Tables 4.9-9 and 4.9-10 combine the operational and mobile GHG emissions associated with Phase I and II development. GHG emissions associated with Phase I would total approximately 9,460 metric tons per year of CDE. This total represents roughly 0.002% of California's total 2004 emissions of 492 million metric tons. GHG emissions associated with Phase II would total approximately 7,505 metric tons per year of CDE. This total represents roughly 0.002% of California's total 2004 emissions of 492 million metric tons.

**Table 4.9-9
Phase I Combined Annual Emissions
of Greenhouse Gases**

Emission Source	Annual Emissions
Operational	3,153 metric tons CDE
Mobile	6,307 metric tons CDE
Phase I Total	9,460 metric tons CDE

CDE = carbon dioxide equivalents

Sources: Operational Emissions from URBEMIS 2007 (version 9.2.4).

California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.

**Table 4.9-10
Phase II Combined Annual Emissions
of Greenhouse Gases**

Emission Source	Annual Emissions
Operational	895 metric tons CDE
Mobile	6,610 metric tons CDE
Project Total	7,505 metric tons CDE

CDE = carbon dioxide equivalents

Sources: Operational Emissions from URBEMIS 2007 (version 9.2.4).

California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.

The emission levels shown in Tables 4.9-9 and 4.9-10 assume that all GHG emissions associated with the CMH Code are new emissions that would not occur if the proposed CMH Code was not implemented. In reality, a majority of the emissions already occur insofar as the Hospital District is currently utilized and some of the buildout under the CMH Code encompasses development that would relocate to the District from other areas within the City.

The emissions estimates for the CMH Code are also conservative because the emissions estimates are, as discussed above, based off of the square feet of development to be added under the CMH Code. As described above, square footage is not representative of the likely impacts of the hospital expansion. In this case, the project consists of the construction of a replacement building to house an existing hospital facility with an increase in capacity of 10 beds, while providing increased square footage to accommodate changing code requirements, larger private patient rooms, and adequately accommodate outpatient services. Moreover, the Phase II analysis conservatively assumes that all uses will be medical office, the most intensive of the permissible uses for the purpose of GHG emissions.

Comparison of GHG Emissions to CAPCOA Thresholds. As discussed under *Methodology*, CAPCOA (January 2008) provides a “tiered” approach to analyzing climate change impacts of a project that has been adopted for this Recirculated DEIR. Applying the first step of CAPCOA’s “tiered” approach, there is no adopted “green list” or AB 32-consistent general or regional plan encompassing the proposed CMH Code. Consequently, the use of a quantitative threshold is appropriate. Table 4.9-1 shows CAPCOA’s suggested thresholds for GHG emissions that could be selected under the “tiered” approach. These various approaches suggested by CAPCOA are used herein to determine whether or not the proposed project’s GHG emissions are “cumulatively considerable.”

As indicated in tables 4.9-9 and 4.9-10, development facilitated by the CMH Code would increase the global GHG inventory by an estimated 9,460 metric tons CDE/year during Phase I and 7,505 metric tons CDE/year during Phase II. At buildout, the Project would emit a combined total of 16,965 metric tons of CDE/year. Based on CAPCOA-suggested threshold of 40,000 to 50,000 metric tons CDE/year, the CMH Code’s contribution of about 9,460 metric tons CDE/year for Phase I would not exceed the numeric threshold. Similarly, the contribution of 7,505 metric tons CDE/year for Phase II would not exceed the quantitative threshold of 40,000 to 50,000 metric tons CDE/year. Even when combined, the GHG emissions from the two phases would be below the threshold. Please note that GHG emissions from construction have not been added into the above total due to the fact that the significance threshold is based on an annual emission level and construction will not overlap with operational emissions (the latter of which is greater and still does not exceed the significance threshold). Still, including the construction and operational emissions would not exceed the significance threshold.

Nevertheless, the proposed project would adopt the CAPCOA “Level 1” mitigation to reduce impacts associated with GHG emissions. The following design features will be made conditions of project approval and apply throughout the CMH Code:

GCC-1 Global Climate Change. The following design features shall be incorporated.

- *New buildings within the Hospital District will have bicycle parking;*
- *The Hospital District includes transit stops for planned routes;*
- *New buildings within the Hospital District will utilize Energy Star roofs and Energy Star appliances;*
- *New buildings within the Hospital District will comply with Title 24*

Mitigation Measures. The proposed CMH Code does not produce GHG emissions above the applicable quantitative threshold, and no mitigation is required. To reduce GHG emissions, however, the project’s design features would include CAPCOA’s “Level 1” mitigation measures. In addition, mitigation measure AQ-3(a) will require a reduction in Energy Efficiency of 20% beyond Title 24, which is a CAPCOA “Level 2” mitigation measure. Other project design features discussed below in Impact GCC-2 would further reduce GHG emissions.

Significance After Mitigation. The impact with respect to GHG emissions is Class III, less than significant.



Impact GCC-2 The proposed CMH Code is consistent with the GHG reduction strategies and measures in the Climate Action team report, OPR guidance document, and CEQA Guidelines. The proposed hospital expansion is consistent with the Green Guide for Health Care. The CMH Code's impacts related to the project's consistency with plans designed to reduce GHG emissions are Class III, *less than significant*.

GHG reduction strategies and measures in the Climate Action team report, OPR guidance document, and the Green Guide for Health Care are discussed below. Please note that the Green Guide is discussed in the context of Phase I of the project only since it applies to the hospital expansion.

Climate Action Team Strategies Evaluation. The Climate Action Team, established by Executive Order S-3-05, has recommended strategies to reduce GHG emissions at a statewide level to meet the goals of the Executive Order (http://www.climatechange.ca.gov/climate_action_team/index.html). Several of these actions are already required by California regulations. The CMH Code's consistency with the Climate Action Team Strategies is discussed in Table 4.9-11. It should be noted that because the CMH Code seeks to intensify development in an existing urban environment, it would be expected to reduce reliance on the drive-alone automobile. A reduction in vehicle use and vehicle miles traveled would result in a reduction in fuel consumption and in air pollutant emissions, including GHG emissions.

Table 4.9-11
CMH Code Consistency with Applicable Climate Action Team
Greenhouse Gas Emission Reduction Strategies

Strategy	CMH Code Consistency
California Air Resources Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004.	Consistent Vehicles that travel to and from the Hospital District on public roadways would be in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Diesel Anti-Idling The CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling in July 2004.	Consistent Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the Hospital District are subject to this statewide law. Construction vehicles are also subject to this regulation.
Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans. 2) Require that only low GWP refrigerants be used in new vehicular systems. 3) Adopt specifications for new commercial	Consistent This strategy applies to consumer products. All applicable products would comply with the regulations that are in effect at the time of manufacture.



**Table 4.9-11
CMH Code Consistency with Applicable Climate Action Team
Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
refrigeration. 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs. 5) Enforce federal ban on releasing HFCs.	
Alternative Fuels: Biodiesel Blends CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	Consistent Diesel vehicles that travel to and from the Hospital District on public roadways could utilize this fuel once it is commercially available.
Alternative Fuels: Ethanol Increased use of E-85 fuel.	Consistent People traveling to and from the Hospital District could choose to purchase flex-fuel vehicles and utilize this fuel once it is commercially available in the region and local vicinity.
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	Consistent Heavy-duty vehicles that travel to and from the Hospital District on public roadways would be subject to all applicable CARB efficiency standards that are in effect at the time of vehicle manufacture.
Achieve 50% Statewide Recycling Goal Achieving the State's 50% waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional reduction is needed.	Consistent The City of Ventura has already achieved the 50% Statewide Recycling Goal. It is anticipated that the Hospital District would similarly divert at least 50% of its solid waste through recycling. Development projects under the CMH Code will be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.
Zero Waste – High Recycling Efforts to exceed the 50% goal would allow for additional reductions in climate change emissions.	Consistent It is anticipated that the Hospital District would similarly divert at least 50% of its solid waste through recycling. Projects under the CMH Code would be conditioned to provide recycling bins to promote recycling. Individual projects under the CMH Code would also be subject to all applicable State and City requirements for solid waste reduction as they change in the future.
Department of Forestry	
Urban Forestry A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	Consistent The CMH Code incorporates vegetation in the Hospital District and street trees on surrounding streets. In addition, the Hospital District would include two new open space areas.
Department of Water Resources	
Water Use Efficiency	Consistent

Table 4.9-11
CMH Code Consistency with Applicable Climate Action Team
Greenhouse Gas Emission Reduction Strategies

Strategy	CMH Code Consistency
Approximately 19% of all electricity, 30% of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	The CMH Code proposes to include drainage processes, such as parks, infiltration systems, and a storm water treatment system to retain runoff from the Hospital District and recharge groundwater supplies.
Energy Commission (CEC)	
<i>Building Energy Efficiency Standards in Place and in Progress</i> Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	Consistent All future development under the CMH Code would need to comply with the standards of Title 24 that are in effect at the time of development.
<i>Appliance Energy Efficiency Standards in Place and in Progress</i> Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Consistent Under State law, appliances that are purchased for any development under the CMH Code, both pre- and post-development, would be consistent with energy efficiency standards that are in effect at the time of manufacture.
<i>Fuel-Efficient Replacement Tires & Inflation Programs</i> State legislation established a statewide program to encourage the production and use of more efficient tires.	Consistent Community members traveling to and from the Hospital District site could purchase tires for their vehicles that comply with state programs for increased fuel efficiency.
<i>Municipal Utility Energy Efficiency Programs/Demand Response</i> Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by municipal utility providers.
<i>Municipal Utility Renewable Portfolio Standard</i> California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 20 percent of retail electricity sales from renewable energy sources by 2017, within certain cost constraints.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by Southern California Edison.
<i>Municipal Utility Combined Heat and Power</i> Cost effective reduction from fossil fuel consumption in the commercial and industrial sector through the application of on-site power production to meet both heat and electricity loads.	<i>Not applicable</i> since this strategy addresses incentives that could be provided by utility providers such as Southern California Edison and The Gas Company.
<i>Alternative Fuels: Non-Petroleum Fuels</i> Increasing the use of non-petroleum fuels in	Consistent People traveling to and from the Hospital District could

**Table 4.9-11
 CMH Code Consistency with Applicable Climate Action Team
 Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
California's transportation sector, as recommended as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	purchase alternative fuel vehicles and utilize these fuels once they are commercially available in the region and local vicinity.
Business, Transportation and Housing	
<i>Measures to Improve Transportation Energy Efficiency</i> Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	Consistent The proposed CMH Code seeks to promote walkability, alternative modes of transportation, and bicycling as a mode of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.
<i>Smart Land Use and Intelligent Transportation Systems (ITS)</i> Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. The Governor is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment. Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	Consistent Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would cut down on vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services.
State and Consumer Services Agency	
<i>Green Buildings Initiative</i> Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as	Consistent As discussed previously, any development under the CMH Code would be required to be constructed in compliance with the standards of Title 24 that are in effect at the time

**Table 4.9-11
CMH Code Consistency with Applicable Climate Action Team
Greenhouse Gas Emission Reduction Strategies**

Strategy	CMH Code Consistency
compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and -leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	of development.
Public Utilities Commission (PUC)	
<i>Accelerated Renewable Portfolio Standard</i> The Governor has set a goal of achieving 33 percent renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by energy providers.
<i>California Solar Initiative</i> The solar initiative includes installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses, increased use of solar thermal systems to offset the increasing demand for natural gas, use of advanced metering in solar applications, and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	Consistent It is recommended that the developers of future projects under the CMH Code consider the installation and use of solar equipment.

The CMH Code is consistent with the measures indicated in the 2006 CAT Report. Consistency with this report illustrates that the CMH Code would coincide with the State's greenhouse legislation and would not hinder the ability to meet statewide emission reduction targets.

June 2008 OPR Technical Advisory Guidance Evaluation. OPR's guidance regarding the discussion of GHG emissions in CEQA documents may be found at <http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>. The CMH Code's consistency with the relevant OPR Guidance is discussed in Table 4.9-12.

**Table 4.9-12
CMH Code Consistency with OPR Guidance**

Measure	CMH Code Consistency
Implement land use strategies to encourage jobs/housing proximity, promote transit-oriented development, and encourage high density development along transit corridors. Encourage compact, mixed-use projects, forming urban villages designed to maximize affordable housing and encourage walking, bicycling and the use of public transit systems.	Consistent Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would reduce vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use



Table 4.9-12
CMH Code Consistency with OPR Guidance

Measure	CMH Code Consistency
	<p>and a circulation system that effectively moves people, goods and services.</p> <p>The proposed CMH Code also seeks to promote walkability, alternative modes of transportation, and bicycling as modes of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p>
Encourage infill, redevelopment, and higher density development, whether in incorporated or unincorporated settings	<p>Consistent</p> <p>The CMH Code would guide development within the already-improved Hospital District and encourage relatively high-density infill development.</p>
Encourage new developments to integrate housing, civic and retail amenities (jobs, schools, parks, shopping opportunities) to help reduce VMT resulting from discretionary automobile trips.	<p>Consistent</p> <p>Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would reduce vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services.</p> <p>The proposed CMH Code also seeks to promote walkability, alternative modes of transportation, and bicycling as modes of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p>
Apply advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.	<p>Consistent</p> <p>The CMH Code seeks to promote a planned system of transportation, including accessibility for pedestrians and cyclists. In addition, the site is oriented to encourage the use of several bus lines.</p>
Incorporate features into project design that would accommodate the supply of frequent, reliable and convenient public transit.	<p>Consistent</p> <p>The proposed CMH Code seeks to promote walkability, alternative modes of transportation, and bicycling as a mode of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p> <p>The Hospital District is sited in an existing urban area in close proximity to several bus lines and bike routes.</p>
Implement street improvements that are designed to relieve pressure on a region's most congested roadways and intersections.	<p>Consistent</p> <p>Development under the proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would reduce vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services.</p>

Table 4.9-12
CMH Code Consistency with OPR Guidance

Measure	CMH Code Consistency
	<p>The proposed CMH Code also seeks to promote walkability, alternative modes of transportation, and bicycling as modes of transportation. In addition, the CMH Code includes incentives that would encourage those traveling to and from the Hospital District to utilize alternative transportation to travel to the Hospital District.</p> <p>The Hospital District is sited in an existing urban area in close proximity to several bus lines and bike routes.</p>
Limit idling time for commercial vehicles, including delivery and construction vehicles.	<p>Consistent</p> <p>Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the Hospital District are subject to this statewide law. Construction vehicles are also subject to this regulation.</p>
Plant trees and vegetation near structures to shade buildings and reduce energy requirements for heating/cooling.	<p>Consistent</p> <p>The CMH Code incorporates vegetation in the Hospital District and street trees on surrounding streets. In addition, the Hospital District would include two new open space areas.</p>
Preserve or replace onsite trees (that are removed due to development) as a means of providing carbon storage.	<p>Consistent</p> <p>The CMH Code incorporates vegetation in the Hospital District and street trees on surrounding streets. In addition, the Hospital District would include two new open space areas.</p>
Encourage public and private construction of LEED (Leadership in Energy and Environmental Design) certified (or equivalent) buildings.	<p>Consistent</p> <p>The new hospital building is registered with the Green Guide for Health Care Program. While not affiliated with LEED, this program has been developed for hospitals in collaboration with the U.S. Green Building Council (LEED). (LEED itself is not available for use with the expanded hospital.)</p>
Recognize and promote energy saving measures beyond Title 24 requirements for residential and commercial projects	<p>Consistent</p> <p>All future development under the CMH Code would need to comply with the standards of Title 24 that are in effect at the time of development.</p> <p>In addition to compliance with Title 24, new buildings will be consistent with the <i>CEQA Guidelines</i> Appendix F recommended mitigation strategies to conserve energy and reduce GHG impacts.</p>
Where feasible, include in new buildings facilities to support the use of low/zero carbon fueled vehicles, such as the charging of electric vehicles from green electricity sources.	<p>Consistent</p> <p>The project is seeking incentives to alternative fueled vehicles and will include preferred parking for fuel efficient vehicles.</p>
Educate the public, schools, other jurisdictions, professional associations, business and industry about reducing GHG emissions.	<p><i>Not applicable</i>, but the CMH Code would not preclude the implementation of this strategy by others.</p>
Replace traffic lights, street lights, and other electrical uses to energy efficient bulbs and appliances.	<p>Consistent</p> <p>As discussed in Section 2.0, <i>Project Description</i>, the new hospital is registered with the Green Guide for Healthcare Program. Under this program, the project would comply with the following:</p> <p>EA1.0 Optimize energy performance EA7 Equipment efficiency (75% of equipment equal to</p>

Table 4.9-12
CMH Code Consistency with OPR Guidance

Measure	CMH Code Consistency
	"energy star")
Purchase Energy Star equipment and appliances for public agency use.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City. New buildings in the Hospital District will utilize "energy star" appliances.
Incorporate on-site renewable energy production, including installation of photovoltaic cells or other solar options.	Consistent It is recommended that the developers of future projects under the CMH Code consider the installation and use of solar equipment. The project is also seeking to purchase green power under contract to promote renewable energy.
Execute an Energy Savings Performance Contract with a private entity to retrofit public buildings.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City.
Design, build, and operate schools that meet the Collaborative for High Performance Schools (CHPS) best practices.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the school districts.
Retrofit municipal water and wastewater systems with energy efficient motors, pumps and other equipment, and recover wastewater treatment methane for energy production.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City or other agencies.
Convert landfill gas into energy sources for use in fueling vehicles, operating equipment, and heating buildings.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by public agencies.
Purchase government vehicles and buses that use alternatives fuels or technology, such as electric hybrids, biodiesel, and ethanol. Where feasible, require fleet vehicles to be low emission vehicles. Promote the use of these vehicles in the general community.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City.
Offer government incentives to private businesses for developing buildings with energy and water efficient features and recycled materials. The incentives can include expedited plan checks and reduced permit fees.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City. Note that the CMH Code seeks to reduce energy, reduce water use and encourage recycling.
Offer rebates and low-interest loans to residents that make energy-saving improvements on their homes.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.	Consistent The proposed CMH Code seeks to promote walkability, alternative modes of transportation, and bicycling. The Hospital District would include bicycle lanes and greater pedestrian access.
Offer government employees financial incentives to carpool, use public transportation, or use other modes of travel for daily commutes.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Encourage large businesses to develop commute trip reduction plans that encourage employees who commute alone to consider alternative transportation modes.	Consistent The CMH Code includes incentives that would encourage those traveling to and from the Hospital District to carpool and utilize alternative transportation to travel to the Hospital District.
Develop shuttle systems around business district parking garages to reduce congestion and create shorter commutes.	<i>Not applicable</i> , but the CMH Code would not preclude the City from considering a shuttle system in connection with the future parking garage.
Create an online ridesharing program that matches potential carpoolers immediately through email.	Consistent The CMH Code includes incentives that would encourage those traveling to and from the Hospital District to carpool. The proposed expanded hospital will consider utilizing an on-line system.

Table 4.9-12
CMH Code Consistency with OPR Guidance

Measure	CMH Code Consistency
Develop a Safe Routes to School program that allows and promotes bicycling and walking to school.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Create incentives to increase recycling and reduce generation of solid waste by residential users.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy.
Implement a Construction and Demolition Waste Recycling Ordinance to reduce the solid waste created by new development.	<i>Not applicable</i> , but the CMH Code would not preclude the implementation of this strategy by the City, which has already achieved the 50% Statewide Recycling Goal. It is anticipated that the Hospital District would similarly divert at least 50% of its solid waste through recycling. Development projects under the CMH Code would be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.
Add residential/commercial food waste collection to existing greenwaste collection programs.	Consistent Development projects under the CMH Code would be conditioned to provide recycling bins to promote recycling of paper, metal, glass, and other recyclable material.

CEQA Guidelines Appendix F Evaluation. In addition to the above CAT and OPR GHG reduction strategies, the *CEQA Guidelines Appendix F* includes recommended mitigation strategies to conserve energy and reduce GHG impacts. According to this document, mitigation measures may include:

1. *Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal.*

As discussed in detail below, the project incorporates several energy efficiency design considerations through the Green Guide for Health Care Program, including the use of energy efficient lighting, energy efficient equipment, and building commissioning. These include credits EAP1, EAP2, EA1.0, EA5, EA6, & EA7.

2. *The potential of siting, orientation, and design to minimize energy consumption, including transportation energy, water conservation and solid-waste reduction.*

The project is sited in an existing urban area in close proximity to several bus lines and bike routes. In addition, the project is seeking to incentivize carpooling, alternative fueled vehicles and bicycling through Green Guide for Health Care Program credits SS4.2, SS4.3, and SS4.4. In addition, the project design promotes conservation of water resources through credits WEP1, WE2.1, WE2.2, & WE2.3. Lastly, the project promotes solid waste reduction through credits MRP1, MR2.1, and MR5.1.

3. *The potential for reducing peak energy demand.*

Peak energy demand would be reduced through overall energy efficiency measures including EAP1, EAP2, EA1.0, EA5, & EA7 as described, which promote the use of equipment and fixtures that have reduced energy demands.

4. *Alternative fuels (particularly renewable ones) or energy systems.*

The project is seeking to purchase green power under contract to promote renewable energy as indicated by credit EA6.0.

5. *Energy conservation which could result from recycling efforts.*

The project promotes recycling efforts by designating recycling areas, recycling construction materials, and through the furniture reuse/recycle credit (MRP1, MR2.1, and MR5.1).

The proposed CMH Code would locate new commercial developments, offices, and hospital facilities in relatively close proximity to residential neighborhoods in the vicinity of the Hospital District. This would cut down on vehicular trips to and from the Hospital District. The CMH Code would help guide future development in the area while ensuring efficient land use and a circulation system that effectively moves people, goods and services. In addition, buildings would be required to be designed to comply with requirements of Part 6, Title 24 of the California Building Standards Code – California Energy Code.

Green Guide for Health Care Program Evaluation. In addition to the proposed project's consistency with Climate Action Team, OPR and CEQA *Guidelines* strategies, the proposed new hospital is also registered with the Green Guide for Health Care Program. The Green Guide for Health Care™ is the healthcare sector's first quantifiable sustainable design toolkit integrating enhanced environmental and health principles and practices into the planning, design, construction, operations and maintenance of healthcare facilities. The Green Guide is not a LEED® rating system and is not a product of the U.S. Green Building Council. However, the Green Guide has a history of collaboration with the U.S. Green Building Council, beginning with an agreement in 2002 to borrow the organizational structure from the USGBC's LEED Green Building Rating System. The Green Guide for Health Care adopted the LEED structure because it is a familiar and effective method used by a rapidly growing segment of the building design, construction, operations and maintenance industries. For many credits, the Green Guide directly incorporates the language of a parallel LEED credit, referencing credits in the LEED systems for New Construction, Existing Buildings – Operations and Maintenance and Commercial Interiors. In some cases, existing LEED credits have been modified to respond to the unique needs and concerns of healthcare facilities. In others, new credits have been added beyond those in current LEED products.

It is anticipated that the hospital portion of the project would achieve between 24 -40 total points. At this preliminary stage in the design process, the hospital portion of the project has been registered and numerous credits have been identified for pursuit, including the following:

- SSP1 *Erosion control plan*
- SS1 *Avoid virgin land*
- SS2 *Density of > 30ksf/acre*
- SS4.1 *Locate building within ¼ mile of two bus lines*
- SS4.2 *Incorporate bike racks and showers*
- SS4.3 *5% preferred parking for fuel efficient vehicles*
- SS4.4 *5% preferred parking for carpools*

- SS5.3 50% of parking in a structure
- SS6.1 decrease runoff by 25%
- SS6.2 Treat 90% of runoff
- SS9.1 Provide outdoor place of respite
- WEP1 Non-potable water for equipment cooling
- WE2.1 Water use measurement (separate meters for different uses)
- WE2.2 Motion sensor valves in patient sinks and public toilets
- WE2.5 Condensate reuse
- EAP1 Basic commissioning
- EAP2 Min. energy performance
- EAP3 No CFC based refrigerants in HVAC
- EA1.0 Optimize energy performance
- EA5 Electricity use measurement (separate metering for distinct uses)
- EA6.0 Green power purchase contract
- EA7 Equipment efficiency (75% of equipment equal to “energy star”)
- MRP1 Designated recycling collection areas
- MRP2 Mercury elimination I (mercury reduction plan, no mercury in equipment, No HID mercury vapor lamps, Energy Star exit signs)
- MR2.1 Recycle 50% of construction waste
- MR4.2 Mercury Elimination II (low mercury fluorescent lamps)
- MR4.3 Lead and cadmium free paints
- MR5.1 Furniture reuse/recycle
- EQP1 Minimum AIQ performance

Furthermore, water conservation measures discussed in Section 4.8, *Water Supply*, are incorporated into the CMH Code and would be utilized to reduce water use within the Hospital District.

In addition to mitigation recommended by CAPCOA and implemented through the CMH Code, the Code would be consistent with CAT strategies as demonstrated in Table 4.9-11, would implement energy conservation measures described in the *CEQA Guidelines*, and is being designed to reduce effects related to energy consumption, water consumption, waste generation pursuant to the Green Guide for Health Care. The list of project design features that obtain credits under the Green Guide (SSP1 through EQP1 above) will be made enforceable as project conditions pursuant to *CEQA Guidelines* Section 15091(d).

After implementation of the CAPCOA Level 1 mitigation measures as well as implementation of the project design features receiving credits under the Green Guide for Health Care, and because of the Code’s consistency with the Climate Action Team strategies, the CMH Code’s contribution to cumulative GHG emissions and climate change would not be cumulatively considerable.

Mitigation Measures. The proposed CMH Code is consistent with the goals, strategies, and measures contained in the 2006 Climate Action Team report, the 2008 OPR guidance document, and *CEQA Guidelines* Appendix F. Furthermore, Phase I of the project is consistent with the Green Guide for Health Care Program. Mitigation is not required.

Significance After Mitigation. The impact with respect to GHG emissions would be less than significant.

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5.0 GROWTH EFFECTS AND OTHER CEQA SECTIONS

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Section 4.0, Environmental Impact Analysis. These additional issues include the CMH Code's potential to induce growth and potential significant and irreversible effects on the environment.

5.1 GROWTH INDUCING EFFECTS

Section 15126.2(d) of the *CEQA Guidelines* requires that EIRs discuss the potential for projects to induce population or economic growth, either directly or indirectly. CEQA also requires a discussion of ways in which a project may remove obstacles to growth, as well as ways in which a project may set a precedent for future growth.

Growth may be induced in the following ways:

- *The removal of an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area.)*
- *Urbanization of land in a remote area (leapfrog development)*
- *Establishment of a precedent-setting action (e.g., change in zoning or general plan)*
- *Economic expansion or growth in response to the CMH Code*

5.1.1 Population and Economic Growth

No residential units are included in the development projections (see Table 2-3 in Section 2.0, *Project Description*) for the CMH Project; however, hospital residential uses, including multi-unit, home occupation, live/work, and special residence are permitted uses under the CMH Code (see Table 2-2 in Section 2.0, *Project Description*) to provide housing opportunities for medical staff and visitors within the hospital campus. Single family dwellings are not permitted within the Hospital District, which is intended to function as a medical campus. Moreover, the CMH Code Shopfront frontage type precludes residential use on the ground floor facing the street. Residential uses are recommended above the ground floor and behind another use that fronts the street. However, as mentioned above, no residential development is specifically proposed at this time. If housing is proposed at some time in the future, any residential development is anticipated to contribute to meeting the 8,000 dwelling unit buildout projected under the City's 2005 General Plan. Any residential units constructed in the Hospital District would be consistent with this projection.

The existing hospital is proposed to be expanded by 10 beds as part of Phase I, while 3,900 sf of retail space is proposed and 104,000 sf of medical office space is proposed as a backfill use within the existing hospital. Under Phase II, 162,950 sf of medical office space is proposed as part of a medical office campus, along with a 570 space parking garage. Therefore, the majority of jobs will come from the medical office backfill of the old hospital and buildout of the Hospital District. Employment projections were derived based on employment densities for office and retail uses in the southern California region, in addition to the ratio of employees/beds at the existing hospital. Estimated employment generation is shown in Table 5-1.

**Table 5-1
Estimated Employee Generation**

Phase	Generation Rate	Number of New Employees
Phase I Net Increase (2010-2014)		
10 bed Hospital	6 employees/bed **	60
3,900 sf retail liner building	1 employee/585 sf *	7
104,000 sf medical office (old hospital reuse)	1 employee/466 sf *	223
Total		290
Existing Employment Displaced		
45,506 sf of medical office	1 employee/466 sf	(98)
Phase II Net Increase (2014-2025)		
162,950 sf medical office	1 employee/466 sf *	349
570 space parking garage	None	0
Total		349
Net Increase Phase I + Phase II		541

Source: * The Natelson Company, Terry Hayes & Associates for SCAG. 2001. Table 1A Derivation Square foot/Employee, Median Employees/Acre, Median FAR, Five County Region.

** based on existing hospital employees to beds ratio (1,450 employees/242 beds = 6 employees/bed). The resulting ratio (six employees per bed) is conservative for the purpose of this EIR's impacts analyses because the existing employee count (1,450) includes employees not assigned to patient care (i.e., beds). The hospital generally operates efficiently at a ratio lower than six employees per bed.

Based on the estimates above, Phase I development would create an estimated 290 new jobs (with the hospital itself generating 60 jobs), while Phase II development would add about 349 new full time jobs. The employment projections are included within the overall growth assumptions that are evaluated in the environmental analyses for each issue area (as applicable). As noted in this EIR, there are no significant effects with respect to traffic or noise due to increased trip generation. There is a significant impact with respect to operational air quality due to vehicular emissions that would exceed the VCAPCD thresholds for NO_x and ROG; however, this impact would be less than significant after mitigation.

The existing hospital employs about 1,450 full time persons, including about 250 for the Family Health Center Program (personal communication, Sandy Smith, February 2010) and it is estimated that there are currently about 98 jobs in addition to the CMH jobs. Therefore, buildout under the CMH Code would result in about a 37% increase in employment density for the Hospital District.

The 2005 General Plan estimated a net increase of 14,479 jobs citywide through 2025. The estimate of 541 new jobs generated within the Hospital District is within the 14,479 increase in

jobs that was estimated in the 2005 General Plan. Consequently, economic growth inducing impacts would not exceed General Plan forecasts and would not be significant.

5.1.2 Removal of Obstacles to Growth

The CMH Code would not facilitate development in any undeveloped areas. Consequently, it would not open up new areas to development or otherwise remove obstacles to growth. The CMH Code would facilitate construction of a new hospital building and supportive medical office uses in the vicinity in addition to facilitating reuse of the existing hospital building. In this way, it could induce further growth within the Hospital District, but such potential growth has been accounted for in this EIR. The Hospital District is located in Midtown area of the City of Ventura, which is an already urbanized and developed area. Therefore, adverse impacts due to removal of obstacles to growth would not be significant.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

The *CEQA Guidelines* require that EIRs evaluating projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed development.

Construction facilitated by the CMH Code would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to Ventura or the Hospital District. The Project would irreversibly increase local demand for non-renewable energy resources such as petroleum and natural gas. Increasingly efficient building fixtures and automobile engines, as well as policies and actions implemented under the 2005 General Plan, are expected to offset the demand to some degree. It is not anticipated that growth accommodated under the CMH Code would significantly affect local or regional energy supplies.

Growth facilitated by the CMH Code would require an irreversible commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, City services provided to the Hospital District would not be significantly increased, as the area is currently served by the City. Moreover, impacts to public services and utilities were determined to be less than significant within the Initial Study (see Appendix A)

Additional vehicle trips associated with buildout under the CMH Code would incrementally increase local traffic and noise levels and regional air pollutant emissions. However, none of these impacts were determined to be significant under CEQA (see sections 4.2, *Air Quality*, and 4.5, *Traffic and Parking*).

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6.0 ALTERNATIVES

As required by Section 15126.6 of the *CEQA Guidelines*, this section of the EIR examines a range of reasonable alternatives to the Project. Per Section 15126.6, the purpose of the alternatives analysis in EIRs is to identify alternatives that would attain most of the objectives of a proposed project, but that “would avoid or substantially lessen any of the significant effects of the project...” Based on the analysis in Section 4.0, *Environmental Impact Analysis*, the proposed Project would not result in any unavoidably significant impacts. Thus, consideration of alternatives is not needed in order to address significant environmental effects. Nevertheless, the following three alternatives have been evaluated:

- *Alternative 1: No Project (no development - no change to existing land uses)*
- *Alternative 2: Buildout Under Existing Zoning*
- *Alternative 3: Reduced Project, Phase I Only*

These alternatives are described in the impact analysis for each alternative. This section also includes a discussion of the “environmentally superior alternative” among those studied.

6.1 ALTERNATIVE 1: NO PROJECT

This alternative assumes that the proposed Community Memorial Hospital District Development Code is not adopted and that development within the Hospital District would not occur. As such, environmental conditions would not change under this alternative. Implementation of this alternative would not result in any physical changes as it would not accommodate any new development. There would be no impact with respect to aesthetics, air quality, historic resources, noise, traffic and parking, or hydrology and water quality. Therefore, although the proposed Project would not result in any unavoidably significant impacts related to any of these issue areas, the No Project alternative’s impact would be lower. It should be noted, however, that implementation of the No Project alternative would not preclude future redevelopment activity at CMH or within the Hospital District.

6.2 ALTERNATIVE 2: BUILDOUT UNDER EXISTING ZONING

This alternative assumes that the proposed Hospital District is developed based on existing zoning, including the Midtown Corridors Development Code and City of Ventura zoning designations. The Midtown Corridors Development Code is a form-based code that is applicable to the Main Street and Thompson Boulevard corridors. The Midtown Corridors Development Code assigns zoning designations to land uses in the vicinity of the Main Street and Thompson Boulevard corridors, including about half of the Hospital District (see Figure 2-5 in Section 2.0, *Project Description*). The Midtown Corridors Development Code currently regulates zoning of all land uses within the proposed Hospital District, except the property that contains CMH and the property between the hospital and Cabrillo Drive. The City of Ventura Municipal Code Zoning Ordinance guides development of the property that contains CMH and the property between the hospital and Cabrillo Drive.

Development accommodated in the Hospital Zone (H) (see Figure 2-5) would be regulated by existing zoning designations. Permitted uses on the CMH property include medical care, medical services, community meeting, safety services, and parking. There are no general minimum lot area, minimum lot width, or maximum lot coverage standards for the Hospital Zone, provided that the decision-making authority may specify such standards for a particular site as a condition of approval of a planned development permit. In order to construct a new hospital building and adhere to the existing zoning regulations, CMH would need to demolish the existing hospital building because the majority of this zone is already developed.

If a new hospital building were constructed within the existing Hospital Zone, it might be of a similar height as the existing hospital, but could have a larger massing to accommodate the additional square footage needed to accommodate modernized hospital operations. The existing hospital is 225,299 sf, while the hospital design analyzed throughout the EIR consists of about 356,000 sf plus reuse of 121,000 sf of the old hospital, for a total of 477,000 sf.

Development accommodated on the property between CMH and Cabrillo Drive would be regulated by existing zoning designations. Permitted uses on this property would include medical services; administrative, business, and professional services; parking; safety services; and government services. This property is currently developed with medical office buildings. The maximum height for development on this property would be three stories and 45 feet. The minimum area for development would be 6,500 sf per lot. Therefore, redevelopment of this property under the existing zoning would be similar to existing development on this property, which includes one to three story medical office buildings and parking lots.

Development in the Hospital District (excluding the CMH property and the property between CMH and Cabrillo Drive) would be regulated by Midtown Development Code zoning designations. These properties are zoned T5.2, which is intended to accommodate mixed-use, and high density residential infill. The northern portion of the Hospital District along Loma Vista Road and along Main Street would be subject to the Residential Overlay Two, which would limit maximum height to three stories and 40 feet for a flat roof, or 45 feet for a sloped roof. The portions of the Hospital District that front Loma Vista Road and Main Street would include a Shopfront Overlay. The Shopfront Overlay identifies street frontages intended to become areas for retail shops and other pedestrian-oriented businesses at the sidewalk level.

Development accommodated on the CMH property and the property between CMH and Cabrillo Drive could include construction of a new hospital if the existing hospital were demolished, while medical office uses could be constructed on the property that lies between Cabrillo Drive and the Hospital. Development accommodated under existing Midtown Development Code zoning would include primarily residential uses with commercial uses on the ground floor fronting Loma Vista Road and Main Street.

6.2.1 Aesthetics

This alternative would be consistent with the objectives, goals and policies of the 2005 General Plan pertaining to aesthetics. If a new hospital building were constructed, it might be of a similar height as the existing hospital, but could have a larger massing to accommodate the additional square footage needed to contain the hospital operations. The existing hospital is

225,299 sf, while the proposed new hospital would consist of 356,000 sf plus reuse of 121,000 sf of the old hospital, for a total of 477,000 sf. Therefore, if a new hospital were constructed in the location of the old hospital, it could involve the construction of a building that is roughly twice the mass of the existing building in order to provide the same building area as is proposed. In addition, residential and commercial development accommodated in the Hospital District would be limited to three stories in height. Therefore, this alternative would not affect views of the hillsides. As with the proposed Project, impacts related to aesthetics would not be significant for this alternative. Mitigation would not be needed.

6.2.2 Air Quality

Air quality impacts associated with construction accommodate under this alternative would be similar to those associated with buildout under the CMH Code, but may be reduced slightly due to elimination of the 104,000 sf within the existing hospital. As with the Project, temporary construction impacts would not be significant. Operational air quality impacts associated with this alternative would be slightly lower than what would occur under the Project's potential development scenario. This is because the Project would include expansion of the hospital facility, and buildout under the City's P-O zoning in addition to the T5.2 zoning would accommodate a mix of commercial and residential uses, but the 104,000 sf of backfill of medical office uses associated with the existing hospital would be eliminated. Therefore, operational air quality impacts would likely be somewhat lower, but would still be significant but mitigable, the same as with the proposed project.

6.2.3 Historic Resources

As discussed in Section 4.3, *Historic Resources*, development in the Hospital District would occur within the setting of one eligible property: the Sears Roebuck building at 2750 E. Main Street. However, development in the Hospital District would not have a significant or adverse effect on the eligibility of the Sears Roebuck building. Impacts to historic resources would be less than significant and, as with the Project, mitigation would not be required.

6.2.4 Noise

Construction noise associated with this alternative would be similar to that of the Project, with Phase I encompassing demolition of the existing hospital building and reconstruction of a new building that would likely be of a similar or greater scale and of similar duration. Operational noise associated with this alternative would likely be similar to that of the Project, with less than significant impacts related roadway generated noise, due to a similarity in the density of this alternative as compared with the Project. With respect to noise exposure, this alternative would have the potential for mixed use noise conflicts due to parking lots, residential and commercial uses in close proximity, as well as reconstruction of a helipad on the new building. Development in the Hospital District would be required to comply with applicable noise standards and requirements such as the City's 45 dBA interior noise requirements for residences. Therefore, the impact with respect to noise exposure would remain significant but mitigable, the same as with the proposed project and mitigation measure N-3 would apply.

6.2.5 Traffic and Parking

Traffic impacts of Phase I development would be reduced as compared with the proposed Project due to elimination of the 104,000 sf of medical office reuse, which would eliminate 3,758 ADT, which is a 46% reduction in overall Phase I traffic and about 97% of the net increase in Phase I traffic (accounting for removals associated with existing medical office uses). In addition, since there would be no backfill of the existing building, parking demand may not exceed the available supply as would occur with the Proposed Project (see impact statement T-3 in Section 4.5, *Traffic and Parking*). Thus, the impacts of Phase I development under this alternative with respect to traffic would be lower than those of the proposed Project, though this alternative's traffic impacts would remain significant but mitigable with payment of fees. Parking demand may be reduced under Phase I due to the lack of backfill reuse in the old hospital building. Under Phase I, parking demand would be reduced by about 347 spaces (104,000/300 sf per parking space). Mitigation measure T-3(a) for temporary traffic and construction impacts would still apply; however, Mitigation Measure T-3(b) may not be necessary.

6.2.6 Hydrology and Water Quality

Stormwater conveyance impacts associated with this alternative would be about the same as would occur under the Project because the development footprint would be about the same. The impact would be significant but mitigable with infrastructure conveyance upgrades and replacement of components displaced during construction. Construction and operational water quality impacts would be about the same as with the proposed project, less than significant, due to compliance with NPDES permit requirements including an SWPPP during construction and SQUIP BMPs during operation.

6.3 ALTERNATIVE 3: REDUCED PROJECT - PHASE I ONLY

This alternative would include development associated with the Phase I of the Project only. Phase I would occur from 2010 to 2014 and would include demolition of nine Project Area structures (45,506 sf of commercial/medical office use and 4 single family residences), construction of the new hospital building (356,000 sf and a net increase of 10 beds), adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse), streetscape improvements to streets, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the plan area would be consolidated and restriped with the addition of a 3,900 sf retail liner building (Building 18), which would be constructed adjacent the location of surface parking to the south and opposite the hospital open space plaza.

This alternative would not include development accommodated under Phase II, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. It should be noted, however, that adoption of this alternative would not preclude future development within the Hospital District. Table 6-1 compares the development accommodated by this Alternative to the Project.

**Table 6-1
Project vs. Alternative 3 Increase in Potential Development**

	Hospital (sf)	Retail (sf)	Medical Office (sf)
Project	356,000	3,900	266,950
Alternative 3	356,000	3,900	104,000
<i>Net Change</i>	<i>0</i>	<i>0</i>	<i>-162,950</i>

As shown in Table 6-1, this alternative would not result in a change in the amount of hospital or retail development. However, it would result in a 40% decrease in medical office uses compared to the Project. Instead of medical offices uses as proposed under the Project, the existing commercial development would remain in the Hospital District.

6.3.1 Aesthetics

Development under this alternative would be consistent with 2005 General Plan goals, and policies related to aesthetics. In addition, similar to the proposed Project, implementation of this alternative would not significantly affect views of the hillsides. As with the Project, impacts to aesthetics would not be significant under this alternative and mitigation would not be required.

6.3.2 Air Quality

Under this alternative, Phase II construction and operational air quality impacts would be eliminated. Construction mitigation would not be necessary, but would still be recommended to reduce dust and ozone precursors, the same as with the proposed project. Phase I Operational emissions are shown below in Table 6-2.

**Table 6-2
Phase I Operational Emissions Estimates (lbs/day)**

Net Increase in Development by Phase	ROG	NOx
Phase I		
10 beds	19	20
104,000 sf new medical office use		
3,900 sf retail		
<i>VCAPCD Threshold</i>	<i>25</i>	<i>25</i>
Significant Impact	No	No

Source: URBEMIS V.9.2.2, see Appendix C
Notes. Emissions estimates reflect the URBEMIS mitigated totals to account for the developed environment, including: local serving retail, mix of uses (900 jobs and 850 residences within ½ mile radius), 70 buses/day within ¼ mile, bike lanes on 60% of arterials, 100% of streets with sidewalks. These are existing conditions in the Project vicinity.

As shown in Table 6-2, operational emissions would be ~~2019~~ lbs/day of ROG and 21 lbs/day of NOx. No mitigation would be necessary for operational air quality impacts and CMH would not need to implement a TDM Program or pay City TDM fees pursuant to Ordinance 93-37 and Mitigation Measures AQ-3(a-b) would be eliminated.

6.3.3 Historic Resources

As discussed in Section 4.3, *Historic Resources*, development in the Hospital District would occur within the setting of one eligible property: the Sears Roebuck building at 2750 E. Main Street. However, as with the proposed Project, development in the Hospital District under this alternative would not have a significant or adverse effect on the eligibility of the Sears Roebuck building. As with the Project, this alternative's impacts to historic resources would not be significant and mitigation would not be required.

6.3.4 Noise

Construction noise associated with this alternative would be reduced compared to the Project due to the elimination of the 162,950 square feet of medical office development and removal of the parking garage that would be constructed under Phase II. Operational noise and exposure impacts would be lower than those of the proposed Project because there would be less roadway generated noise and less potential for noise conflicts due to the elimination of Phase II development. This alternative would not have significant impacts related to traffic-generated noise, the same as with the Project. However, unlike the Project, this alternative would not have significant impacts related to noise conflicts. Thus, the Project mitigation measure N-3 in Section 4.4, *Noise* would not be required.

6.3.5 Traffic and Parking

Overall traffic would be reduced compared to the Project and traffic impacts would be about 70% lower. Table 6-3 shows traffic comparison between Phase I and Phase II, accounting for removal of traffic associated with the buildings demolished under Phase I. However, traffic impact would remain significant but mitigable with payment of fees, the same as with the proposed project.

Table 6-3
Phase I vs. Phase II Average Daily and Peak Hour Traffic

	ADT	A.M. Peak Hour	P.M. Peak Hour
Net Increase Phase I *	2,423	158	244
Phase II	5,889	396	597
% Reduction with removal of Phase II	71%	72%	71%

Source: Table 4.5-5 in Section 4.5, *Traffic and Parking*.

* Phase I development traffic totals account for the removals associated with demolition of the existing nine structures

In addition, with removal of 162,950 sf of medical office use, parking demand would be reduced by about 543 spaces (162,950 sf/300 sf per parking space). Mitigation measure T-3(a) would still be required for construction impacts; however, T-3(b) may not be necessary. Thus, this alternative would have less impact than the proposed Project with respect to traffic and parking, though it is noted that impacts associated with the proposed Project would not be significant following mitigation.

6.2.6 Hydrology and Water Quality

Water Quality impacts would be about the same as the proposed Project under this alternative, since the developed area would be about the same. Stormwater discharge amounts and conveyance impacts would remain mitigable with application of HYD-1, due to the necessity to upgrade and replace infrastructure within the Project Area. In addition, short term construction impacts would remain less than significant through compliance with stormwater discharge permit requirements and preparation of a SWPPP. Long term operational impacts would remain less than significant due to compliance with the stormwater discharge permit and SQUIMP requirements for BMPs.

6.4 ALTERNATIVE SITES

The Project involves various policies and actions specific to the Hospital District, including consolidation of hospital operations and reuse of the existing building for non-essential services. Implementing these changes at another location is not feasible since they relate to the development at the current location. Therefore, analysis of alternative sites is not warranted.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 6-4 provides a summary comparison of the Project and the three project alternatives. The table indicates how the impact for each alternative compares to the Project (superior [+], similar [=], or inferior [-]).

Each of the alternatives has specific issue areas for which they are environmentally superior to the proposed Project. Overall, the No Project alternative is considered environmentally superior among the three options. However, the No Project alternative would not meet the major objectives of the Project, which include the following:

- 1) *To construct a new seismically conforming hospital building in accordance with Senate Bill 1953, the Hospital Facilities Seismic Safety Act, which requires hospitals to meet more stringent seismic safety requirements.*
- 2) *To modernize the hospital and consolidate hospital operations through construction of a larger building to hold essential services, while housing non-essential services within the existing hospital facility.*
- 3) *To redevelop the area commonly known as the Hospital Triangle in a manner that integrates open space, activates the pedestrian realm and reinforces the connection with Main Street.*



- 4) *To manage and expand existing parking facilities in a manner that creates a pedestrian friendly environment, accommodates redevelopment and intensification of uses within the Hospital District and prevents overflow of hospital district demand to residential areas on the periphery of the Hospital District.*

Table 6-4
Comparison of the Environmental Impacts of Project Alternatives

Issue	Alt 1 (No Project)	Alt 2 (Buildout Under Existing Zoning)	Alt 3 (Reduced Project: Phase I Only)
Aesthetics	+	=	=
Air Quality	+	=	+
Historic Resources	=	=	=
Noise	+	=	+
Transportation	+	+	+
Hydrology and Water Quality	+	=	=

+ Superior to the proposed project
 - Inferior to the proposed project
 = Similar impact to the proposed project

The No Project alternative would not construct a seismically conforming hospital building, would not modernize the hospital or consolidate operations with reuse of the existing hospital facility would not redevelop the Hospital Triangle in a manner that integrates open space, or activates the public realm. In addition, the No Project alternative would not manage and expand parking facilities in a manner that prevents impacts to pedestrians and surrounding neighborhoods.

Alternative 2, buildout under the existing zoning may not be feasible, since it may not be possible for CMH to suspend the current hospital operation and reopen in 2014 upon completion of a new building that requires demolition of the existing building. Alternative 2 is infeasible from a public policy and social perspective. Western Ventura County has three major providers of hospital services, including CMH (the other two are St. John's and Ventura County Medical Center). In 2008, CMH provided 52,117 "patient days." St. John's provided 53,872 patient days, and VCMC 44,971. Additionally, all three hospitals have comparable licensed beds: 220 for CMH, 266 for St. John's, and 229 for VCMC. Because of CMH's high patient days and the comparable beds at each hospital, the other two hospitals in Western Ventura County do not have the capacity to absorb the demand of patient days at CMH for the period required to implement Alternative 2 (approximately 44 months). Additionally, physicians and hospital staff would be greatly disrupted under Alternative 2's construction period, including a substantial loss of employment opportunities at CMH for the Alternative 2 construction period.

Among the development alternatives, Alternative 3 would be the environmentally superior alternative due to the reduction of air quality, noise and traffic/parking impacts associated with the Project, mostly due to the elimination of 162,950 sf of medical office use. However, Alternative 3 Phase I Only would not preclude additional buildout of the area under the Midtown Corridors Code. Moreover, it should be noted that with mitigation, impacts identified for the proposed Project would not be significant. It should also be noted that Alternative 3 would not meet the Project objectives identified above, particularly those related to parking and activation of the public realm.

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7.0 REFERENCES AND REPORT PREPARERS

7.1 REFERENCES

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7.1.2 Persons Contacted

Chandra Chandrashaker, Land Development
Susan Rungren, Public Works
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Rick Giroux, P.E., Jensen Design and Survey, Inc.
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Teri Thomas, Ventura County Air Pollution Control District
Keith Duval, Engineering Division Manager, Ventura County Air Pollution Control District

7.2 REPORT PREPARERS

This EIR was prepared by the City of Ventura with the assistance of Rincon Consultants, Inc., San Buenaventura Research Associates supplied a technical evaluation of Historical Resources, while Austin-Foust Associates, Inc. completed a traffic model run. Cori Thomas, Senior Planner, managed the preparation of the EIR for the City. Consultant staff involved in the preparation of the EIR are listed below.

Rincon Consultants, Inc.

Joe Power, AICP, Principal
Cori Thomas, Project Manager
John Stark, Associate Planner
Morgan Musgrove, Associate Planner



Section 7.0 References

Julie Broughton, Senior Paleontologist
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Katherine Warner, Graphics Technician/GIS Specialist

San Buenaventura Research Associates
Mitch Stone



8.0 ADDENDA and ERRATA/ RESPONSES to COMMENTS

8.1 BACKGROUND

As noted in Section 1.0, *Introduction*, a Draft EIR was circulated for public review from March 22, 2010 until May 19, 2010. The city received ten comment letters on the Draft EIR. Based on the comments received, City staff determined that the responses included potentially significant new information related to potential environmental impacts. Consequently, based on the requirements of *CEQA Guidelines* Section 15088.5, the Draft EIR was recirculated to allow for additional public review of the new information. The revised and recirculated document superseded in its entirety the Draft EIR circulated from March 22nd to May 19th. Although the comment letters submitted in response to the original Draft EIR are part of the administrative record for the project, pursuant to *CEQA Guidelines* Section 15088.5(f)(1) the City has provided written responses to only comments received during the second 45-day public review period of August 13, 2010 through September 27, 2010. Seven comment letters were received during the second 45-day review period.

CEQA Guidelines Section 15088.5(f)(1) states:

(1) When an EIR is substantially revised and the entire document is recirculated, the lead agency may require reviewers to submit new comments and, in such cases, need not respond to those comments received during the earlier circulation period. The lead agency shall advise reviewers, either in the text of the revised EIR or by an attachment to the revised EIR, that although part of the administrative record, the previous comments do not require a written response in the final EIR, and that new comments must be submitted for the revised EIR. The lead agency need only respond to those comments submitted in response to the recirculated revised EIR.

Section 1.1.2 of the recirculated Draft EIR provides direction that the City will only respond to comments on the recirculated Draft EIR.

8.2 ADDENDA and ERRATA/ RESPONSES to COMMENTS

This section of the FEIR for the Community Memorial Hospital District Development Code contains all of the written comments received in response to the DEIR during the 45-day public review period. Each comment received by the City of Ventura has been included within this report. Responses to all comments have been prepared to address the concerns raised by the commenters and to indicate where and how the EIR addresses environmental issues. Changes that were made to the EIR in response to comments are included in each response and are shown in ~~strike through~~ and underline format.

This document constitutes the FEIR to be presented to the City of Ventura Planning Commission for review and recommendation to the City Council for certification prior to decisions by the City Council on acceptance and approval of the Community Memorial Hospital Development Code.



Specific comments contained within any particular written letter have been numbered in order to provide a reference to it in the response. Each letter is presented first, followed by responses.

<u>Commenter</u>	<u>Page</u>
1. Tricia Maier, County of Ventura Resource Management Agency	8-3
2. Behnam Emami, Engineering Manager II, County of Ventura Public Works Agency, Transportation Department	8-5
3. Alicia Stratton, Ventura County Air Pollution Control District	8-8
4. Alicia Stratton, Ventura County Air Pollution Control District	8-19
5. Tom Wolfington, Ventura County Watershed Protection District	8-22
6. Robin Jester, Ventura County Watershed Protection District	8-25
7. Daniel Blankenship, California Department of Fish and Game	8-29



September 27, 2010

City of Ventura
Community Development Dept.
Attn.: Jeffrey Lambert
501 Poli Street, Room 133
PO Box 99
Ventura, CA 93002-0099

Letter 1

E-mail: jlambert@ci.ventura.ca.us

Subject: Comments on NOC and NOA of a DEIR for the Proposed Community Memorial Hospital District Development Code

Dear Mr. Lambert:

Thank you for the opportunity to review and comment on the subject document. Attached are the comments that we have received resulting from intra-county review of the subject document. Additional comments may have been sent directly to you by other County agencies.

Your proposed responses to these comments should be sent directly to the commenter, with a copy to Laura Hocking, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Laura Hocking at (805) 654-2443.

Sincerely,



Tricia Maier, Manager
Program Administration Section

Attachment

County RMA Reference Number 09-047-2

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509



Letter 1

COMMENTER: Tricia Maier, County of Ventura Resource Management Agency

DATE: September 27, 2010

The commenter states that the letter accompanies any comments received from the County's intra-agency review of the document. The commenter directs that responses to the County comments be submitted directly to the commenter, with copy to Laura Hocking. Comments were received from the Public Works Agency Transportation Department, the Ventura County Watershed Protection District, and the Ventura County Air Pollution Control District. Responses will be sent to each commenter with a copy to Laura Hocking.



**PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division**

MEMORANDUM

Letter 2

DATE: May 4, 2010

TO: RMA – Planning Division
Attention: Laura Hocking

FROM: Behnam Emami, Engineering Manager II

SUBJECT: REVIEW OF DOCUMENT 09-047

Notice of Availability (NOA of Administrative Draft Environment Impact Report (ADEIR)

Community Memorial Hospital District Development Code.

Adoption of the CMH Code to guide redevelopment of approximately 10 acres.

North Brent Street to the east, and East Main Street to the west.

Lead Agency: **City of San Buenaventura**

Pursuant to your request, the Public Works Agency -- Transportation Department has reviewed the subject NOA of ADEIR for the Community Memorial Hospital District Development Code (CMH Code).

The proposed project involves the adoption of the CMH Code to guide redevelopment of approximately 10 acres within the Midtown portion of the City. The project would be constructed in two phases:

Phase I would occur from 2010 to 2014 and would include demolition of nine project area structures (45,506 SF of commercial/medical office use and 4 single family residences), construction of the new hospital building (320,000 SF and a net increase of 12 beds), adaptive reuse of the existing hospital facilities (121,000 SF for reuse), streetscape improvements to streets, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the plan area would be consolidated and restriped with the addition of a 3,900 SF retail liner building, which would be constructed adjacent to the location of the future new garage and opposite the hospital open space plaza.

Phase II would occur over a period of years and would include build out of the remainder of the hospital district, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Specifically, new buildings and the parking garage would be constructed during the Phase II. Phase II development is estimated to be about 162,950 SF of medical office uses. The project is bounded by Loma Vista Road to the north, North Brent Street to the east, and East Main Street to the west.

We offer the following comments:

1. The cumulative impact of this project, when considered with the cumulative impact of all other approved (or anticipated) development projects in the County, is potentially significant. The condition for paying the County Traffic Impact Mitigation Fee (TIMF) to address the cumulative impacts of this project on the County Regional Road Network should be included in the Final EIR (MND or ND). Based on the information from IS and the Reciprocal Agreement between the City of Ventura and the County of Ventura, the fee due to the County is:

$$8,312 \text{ ADT} \times \$34.55 / \text{ADT} = \$287,179.60$$

The above estimated fee may be subject to adjustment at the time of deposit, due to provisions in the TIMF Ordinance allowing the fee to be adjusted for inflation based on the Engineering News Record Construction Cost Index. The above fee is an estimate only based on information provided in the Initial Study. If the project cumulative impacts are not mitigated by payment of a TIMF, current GP policy will require County opposition to this project.

Our review is limited to the impacts this project may have on the County's Regional Road Network.

Please contact me at 654-2087 if you have questions.

F:\transpor\LanDev\Non_County\09-047-1.doc

Letter 2

COMMENTER: Behnam Emami, Engineering Manager II, County of Ventura Public Works Agency, Transportation Department

DATE: May 4, 2010

The commenter provided a letter that was issued for the previous Draft EIR. The response below addresses those comments.

Response 2

The commenter states that the Project when considered with the cumulative impact of all other approved (or anticipated) development projects in the County, is potentially significant and states that the Project should include a condition requiring payment of County Transportation Impact Mitigation Fees.

The EIR refers to Standard Condition T-1, which requires payment of traffic impact mitigation fees due to the City and the County based on adopted policies. The Project involves construction of a new hospital building and a series of smaller projects that would be implemented incrementally over a period of five to ten years. Fees will be due prior to occupancy for each developer within the Project Area. The net increase in ADT is shown in Table 4.5-7 in Section 4.5, *Traffic and Parking*. The overall net increase in ADT has been revised from the 8,312 ADT indicated during the previous Draft EIR. The overall net increase in ADT is now estimated at 8,289 ADT. Each developer within the Project area would be responsible for fair share fees at the time individual projects are undertaken, as indicated in standard condition T-1.

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Laura Hocking/Dawnyelle Addison, Planning

Letter 3

DATE: September 27, 2010

FROM: Alicia Stratton

SUBJECT: Request for Review of Recirculated Draft Environmental Impact Report (RDEIR) for the Community Memorial Hospital District Development Code, City of Ventura (Reference No. 09-047-2)

Air Pollution Control District staff has reviewed the subject RDEIR, which addresses adoption of the Community Memorial Hospital District Development Code. The Code is intended to guide redevelopment of ten acres within the Midtown portion of the City of Ventura. Phase 1 would occur from 2010 to 2014 and would include demolition of nine Project Areas structures (45,506 sq. ft. of commercial/medical office use and four single family residences), construction of the new hospital building (320,000 sq. ft. and a net increase of 12 beds), adaptive reuse of the existing hospital facilities (121,000 sq. ft. for nonessential hospital support services and 104,000 sq. ft. for new backfill medical office reuse), streetscape improvements to streets, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. The surface parking in the southern portion of the plan area would be consolidated and restriped with the addition of a 3,900 sq. ft. retail liner building, which would be constructed adjacent to the location of the future new garage. Phase II would occur over a period of years and would include buildout of the remainder of the hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Phase II development would be about 162,950 sq. ft. of medical office uses. The project area encompasses 15 acres located in the Midtown portion of the City of Ventura and is bounded by Main Street to the west, Loma Vista Road to the north, and Brent Street to the east.

Section 4.2 of the ADEIR addresses air quality issues. We wish to submit the following comments on this discussion.

General Comments

- | | | |
|---|--|-----|
| 1. Table 4.2-2, AQ Table – the table should indicate (as a footnote) that the data is from the El Rio monitoring station. There is no longer a federal 1-hour standard for ozone. The data for PM10 should indicate that the samples >50 microns & >150 microns are for 24-hours (similar to what was done with the PM 2.5 data). | | 3.1 |
| 2. Impact analysis, page 4.2-8 - The document states “VCAPCD also recommends minimizing fugitive dust through various dust control measures.” Our Rule 55 now requires that fugitive dust be controlled. Let | | 3.2 |

- | | |
|---|------------|
| <p>3. Impact AQ-2 – CMH should be encouraged to contract with companies that have the cleanest diesel-powered construction equipment available. That would be Tier 2 or Tier 3 engines. That would assist in mitigating construction impacts of ROC, NOx and diesel particulate. Although the document states that APCD doesn't have significant thresholds for construction impacts, we are non-attainment for ozone and diesel PM is a toxic air contaminant.</p> | <p>3.3</p> |
| <p>4. The mitigation measures starting on page 4.2-13 will help to minimize fugitive dust. These appear to be taken from APCD Rule 55. We recommend that the RDEIR also includes a reference to compliance with Rule 55. Also, California Air Resources Board has adopted an Air Toxic Control Measure (ATCM) for off-road construction equipment, which must be complied with. This is discussed in general terms on page 4.2-4. (see California Code of Regulations, Article 4.8, Section 2449 - General Requirements for In-Use Off-Road Diesel-Fueled Fleets.) Compliance with the ATCM should be referred to in the mitigation measures.</p> | <p>3.4</p> |
| <p>5. On page 4.2-14 the RDEIR mentions diesel generators and refers to APCD permits. Permits will be required for any new diesel generators, boilers or ethylene oxide sterilizers. An Authority to Construct must be obtained prior to installation. Public notice may be required before issuing the ATC. CMH should contact APCD prior to purchasing any equipment requiring a permit.</p> | <p>3.5</p> |

Air Toxic Health Risk Assessment

- | | |
|--|------------|
| <p>1. The health risk assessment was performed for diesel engine exhaust particulates from construction equipment. The majority of the project will be completed in four years, with additional smaller project construction continuing for more years. The health risk assessment addressed only the four years of major construction as a worst case.</p> <p>Because the health risk assessment addressed a four-year project, the lifetime excess cancer risk was calculated based on four years of exposure. The California Office of Environmental Health Hazard Assessment (OEHHA) has recommended that a nine-year exposure duration be used for short term projects, even if the project is only one year. If a nine-year exposure period is assumed, the calculated lifetime excess cancer risk based on a child's exposure would exceed 10 in a million.</p> <p>This was a screening level assessment, so further refinement could reduce the calculated health risks. We therefore recommend that a formal health risk assessment should be conducted for this project.</p> <p>We concur that chronic noncancer health impacts would be less than the District's 10 in a million threshold for lifetime excess cancer risk.</p> | <p>3.6</p> |
|--|------------|

If you have any questions, please call me at (805) 645-1426.

Letter 3

COMMENTER: Alicia Stratton, Ventura County Air Pollution Control District

DATE: September 27, 2010

Response 3.1

The commenter requests that Table 4.2-2 include a footnote that the data is from the El Rio Monitoring Station. There is no longer a federal 1-hour standard for ozone. That data for PM10 should indicate that the samples >50 microns and >150 microns are for 24-hours (similar to what was done with the PM 2.5 data).

The following changes have been made in response to this comment.

Number of days of federal exceedances (>0.12 ppm)	0	0	0	0
Number of samples of state exceedances (>50 $\mu\text{g}/\text{m}^3$), <u>24-hour average concentration</u>	4	2	3	2
Number of samples of federal exceedances (>150 $\mu\text{g}/\text{m}^3$), <u>24-hour average concentration</u>	0	1	0	0

Source: CARB, Air Quality Data Statistics; available at <http://www.arb.ca.gov/adam/topfour/topfour1.php>
All data except for CO data is from the El Rio Monitoring Station
a No CO monitoring is available in Ventura County, the closest point is the Goleta-Fairview site results.

Response 3.2

The commenter states that the former APCD recommendation to reduce fugitive dust during construction has now been replaced with a requirement pursuant to their new "Rule 55".

The following change has been made in response to this comment.

The VCAPCD also ~~recommends~~ requires minimizing fugitive dust through various dust control measures as documented in Rule 55.

Response 3.3

The commenter indicates that CMH should be encouraged to contract with companies that have the cleanest diesel-powered construction equipment available, including Tier 2 or Tier 3 engines to mitigate the effects of construction-generated NOx, ROG and diesel particulate. The commenter further states that the District is in a state of non-attainment for ozone, while diesel PM is a toxic air contaminant.

In response to this comment the following bullet has been added to Condition of Approval AQ-2.



- Use Tier 2 or Tier 3 engines

Response 3.4

The commenter recommends that condition of approval AQ-2 reference Rule 55 and further include compliance with an ARB adopted Air Toxic Control Measure (ATCM) for off-road construction equipment. The commenter further requests that condition of approval AQ-2 reference compliance with the adopted ATCM. The commenter further states a general description of the ATCM is included on page 4.2-4.

In response to this comment, Rule 55 and the ATCM (codified at California Code of Regulations, Title 13, Division 3, Chapter 9, Article 4.8, § 2449) have been referenced in the condition of approval AQ-2. The general description of this ATCM on page 4.2-4 describes how the program is implemented among off-road vehicle fleet owners in California. Depending on the size of the fleet, the fleet owner would be required to modernize the fleet thereby reducing emissions with the largest fleet owners in compliance first (more than 5,000 hp coming online by March 1, 2010), medium sized fleet owners in compliance by March 1, 2013 and small fleet owners (less than 2,500 hp) in compliance by 2015.

The following changes have been made to condition of approval AQ-2.

Individual developers within the Hospital District, including the Hospital, shall include techniques to limit emissions of both ozone precursors (NO_x and ROC), diesel PM and fugitive dust (PM₁₀) in compliance with AQMD Rule 55 and ARB adopted ATCM (13 CCR § 2449.2). At a minimum, these measures shall include, but not be limited to the following as identified below:

- Contract with an off-road construction equipment provider that has documented compliance with Air Toxics Control Measure (ATCM) PM reduction goals in response to the California Air Resources Board adopted ATCM (13 CCR § 2449.2)

Response 3.5

The commenter notes that page 4.2-14 mentions diesel generators and refers to APCD permits. The commenter states that permits will be required for any new diesel generators, boilers or ethylene oxide sterilizers. An Authority to Construct must be obtained prior to installation. Public notice may be required before issuing the AATC. CMH should contract the APCD prior to purchasing any equipment requiring a permit.

Changes are not necessarily warranted based on the above comment; however, the following language is added to the EIR on page 4.2-15 in response to this comment in the interest of disclosing the process for obtaining permits for stationary equipment.

Permits will be required for any new diesel generators, boilers or ethylene oxide sterilizers. An Authority to Construct (ATC) must be obtained prior to installation. Public notice may be

required before issuing the ATC. The APCD recommends that CMH contact the APCD prior to purchasing any equipment requiring a permit.

Response 3.6

The commenter notes that the health risk assessment evaluates Phase I construction over a period of four years, though buildout of the Project Area under Phase II would occur with construction of individual projects undertaken by individual developers over a number of additional years. The commenter notes that the lifetime cancer risk was based on the four year construction scenario and indicates that the California Office of Environmental Health Hazard Assessment (OEHHA) has recommended that a nine-year exposure duration be used for short term projects, even if the project is only one year. The commenter further expresses an opinion that utilization of a nine-year exposure period would result in exceedance of the 10 in a million lifetime excess cancer risk. The commenter suggests that further refinement could reduce the calculated health risks and suggests that a formal health risk assessment be conducted, while also concluding that the chronic noncancer health impacts would be less than the District's 10 in a million threshold.

It would be inappropriate to apply emissions that are not forecast to occur or to increase the exposure duration to nine years when the receptors would not be exposed to that level of emissions for that full time period, as it would overestimate emissions and would not allow the public or decision-makers to accurately evaluate the relative health risks. However, in this case, there are also Phase II emissions that would occur over a period of years following completion of the Phase I hospital construction. It is noted that Phase II emissions were not included in the health risk assessment that was conducted for Impact AQ-4. This is because Phase II emissions are programmatic and it is not certain when these projects would actually move forward. In addition, the Phase I hospital construction emissions are a more condensed set of emissions (75% of the total project emissions) that are forecast to occur over a specific time period of four years. Thus analysis of Phase I emissions was forecast to generate the greatest quantity of emissions in the most concentrated area; which would have more profound health risks as compared with analysis of subsequent smaller projects occurring in a larger area over a longer period of time.

Nevertheless, since the health risk equation is cumulative exposure divided by the averaging time (in this instance nine years), another possible scenario was considered for the screening level health risk analysis that included Phase II construction (which occurs over a larger footprint of 10 acres) plus Phase I construction over a period of nine years as the commenter requested. The table on the next page reports the results of that scenario.

The previous analysis of Phase I effects is considered more conservative as the assumptions included a greater proportion of the overall emissions (75%), over a shorter period of time (four years) and within a smaller area (five acres). In particular, that methodology results in a more conservative evaluation of the chronic health risk associated with short term exposure. Chronic exposure to diesel particulate matter has been shown to impair lung function, and in animal studies, it has been observed that exposure to diesel exhaust induced inflammatory airway changes and various lung function changes.

**CMH Phase I & 2
Construction Health Risks**

Scenario	Excess Cancer Risk	Chronic Health Risk
Phase 1& 2 Construction		
adult	1.39 E-06	7.22 E-03
child	3.25 E-06	1.68 E-02
<i>Significance Threshold</i>	<i>>1.0E-05</i>	<i>≥1</i>
<i>Exceeds Threshold?</i>	<i>No</i>	<i>No</i>

Scientific notation is sometimes expressed as E (for exponent) as in 1.12E-4 (meaning 1.12 x 10 raised to the negative 4).

The revised analysis indicated the health risks associated with full buildout of the project over a period of nine years would not result in exceedance of health risk thresholds, similar to the conclusions expressed in the DEIR evaluation of Phase I Construction as a worst-case scenario. In fact, the analysis of Phase I plus Phase II emissions over a period of nine years is lower as compared with the original analysis presented under Impact AQ-4. This is because the emissions would essentially be averaged over the entire nine years and a larger 10-acre area.

Under either scenario, the health risks associated with full buildout of the project are not anticipated to result in exceedance of the Excess Cancer Risk threshold or the Chronic Health Risk threshold. Under the nine year full buildout scenario, cancer risk for adults would be 1.4 in one million, whereas cancer risks for children would be 3.25 in one million. Under the four year Phase I analysis scenario, excess cancer risk for adults is 3.26 in one million and 7.6 in one million for children. None of the risks under either scenario exceed the APCD's 10 in one million threshold.

Data supporting the nine year analysis discussion is attached to this response.

Inhalation Health Risk Exposure to Air Contaminant

Project: CMH Hospital District Development Code EIR (Phase I + Phase II) nine years duration
 Chemical of Concern: Diesel Particulates
 Reference Dose, Inhal (RfDi): 1.43E-03
 Cancer Slope Factor, Inhal (SFI): 1.05E+00
 Chronic Inhalation REL 5 ug/cu m
 Ambient Air Concentration: 0.15 ug/cu m
 Note: Annualized concentration based on maximum one hour at worst case stability

NonCarcinogenic

Chronic Health Risk Equation: Intake/Reference Dose

$$\text{Intake} = \frac{\text{CA} * \text{Inh} * \text{EF} * \text{ED}}{\text{BW} * \text{AT} * 1000 \text{ ug/mg}}$$

Where:

Intake = Daily Dose averaged over lifetime (LADD)
 CA = Concentration in air, ug/cu m
 Inh = Inhalation rate
 EF = Exposure frequency in days per year
 ED = Exposure duration in years
 BW = Body weight, kg
 AT = Averaging time

Note: Absorption through lungs assumed at 100%

	Residential	
	Adult	Child
Inh =	20	10
Operating hours/day =	8	8
Operating days/year =	260	260
EF =	86.7	86.7
ED =	9	9
BW =	70	15
AT =	3285	3285
Intake =	1.03E-05	2.41E-05
Chronic Hazard Quotient =	7.22E-03	1.68E-02
Exceed Criterion (>1)?	No	No

OEHHA Chronic Risk: Annual average concentration/REL
 Maximum 1-Hr all Stabilities: 1.52 ug/cu m
 EPA annualization factor: 0.1

Chronic Hazard Quotient = 0.0
 Exceed Criterion (>1)? No

Carcinogenic

Cancer Health Risk Risk = Exposure * Slope Factor

$$\text{Exposure} = \frac{\text{CA} * \text{Inh} * \text{EF} * \text{ED}}{\text{BW} * \text{AT} * 1000 \text{ ug/mg}} \text{ mg/kg-day}$$

Where:

Exposure = Daily Dose averaged over lifetime (LADD)
 CA = Concentration in air, ug/cu m
 Inh = Inhalation rate, m^3/day
 EF = Exposure frequency in days per year
 ED = Exposure duration in years
 AT = Averaging time
 BW = Body Weight

Note: Fraction absorbed (ABS) assumed to be 100%

	Residential	
	Adult	Child
Inh =	20	10
Operating hours/day =	8	8
Operating days/year =	260	260
EF =	86.7	86.7
ED =	9	9
AT =	25550	25550
BW =	70	15
Exposure =	1.33E-06	3.09E-06
Excess Lifetime Cancer Risk =	1.39E-06	3.25E-06
Criterion =	1.0E-05	1.0E-05
Exceed Criterion?	No	No

Diesel PM Exhaust Total

With particulate filters & low sulfur diesel fuel

Sides 201.1680889

10/13/10
14:25:20

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

CMH Construction Phase I + Phase 2 (nine years)

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
EMISSION RATE (G/(S-M**2)) = .683827E-07
SOURCE HEIGHT (M) = 3.1700
LENGTH OF LARGER SIDE (M) = 202.0000
LENGTH OF SMALLER SIDE (M) = 200.0000
RECEPTOR HEIGHT (M) = 1.5000
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
1.	.9923	5	1.0	1.0	10000.0	3.17	45.
100.	1.375	5	1.0	1.0	10000.0	3.17	45.
200.	1.128	5	1.0	1.0	10000.0	3.17	45.
300.	.6837	5	1.0	1.0	10000.0	3.17	45.
400.	.4888	5	1.0	1.0	10000.0	3.17	44.
500.	.3764	5	1.0	1.0	10000.0	3.17	44.
600.	.3024	5	1.0	1.0	10000.0	3.17	44.
700.	.2500	5	1.0	1.0	10000.0	3.17	44.
800.	.2111	5	1.0	1.0	10000.0	3.17	44.
900.	.1815	5	1.0	1.0	10000.0	3.17	44.
1000.	.1581	5	1.0	1.0	10000.0	3.17	44.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:
151. 1.520 5 1.0 1.0 10000.0 3.17 45.

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1.520	151.	0.

10/13/2010 2:14:33 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: L:\ESPI\TA Co\TA, City of\TA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\Construction Phase II.urb924

Project Name: CMH Construction phase II

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2014 TOTALS (tons/year unmitigated)	0.23	1.41	1.16	1.49	0.08	1.57	0.31	0.08	0.39	206.07
2014 TOTALS (tons/year mitigated)	0.23	1.41	1.16	0.84	0.08	0.92	0.18	0.08	0.25	206.07
Percent Reduction	0.00	0.00	0.00	43.38	0.00	41.08	43.34	0.00	34.77	0.00
2015 TOTALS (tons/year unmitigated)	1.10	1.70	2.18	0.01	0.11	0.11	0.00	0.10	0.10	386.29
2015 TOTALS (tons/year mitigated)	1.10	1.70	2.18	0.01	0.11	0.11	0.00	0.10	0.10	386.29
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2016 TOTALS (tons/year unmitigated)	1.25	1.30	1.73	0.01	0.08	0.08	0.00	0.07	0.07	320.12
2016 TOTALS (tons/year mitigated)	1.25	1.30	1.73	0.01	0.08	0.08	0.00	0.07	0.07	320.12
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

= 0.27
tons

SCREEN.OUT

10/14/10
11:10:00

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

CMH Phase 2

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
EMISSION RATE (G/(S-M**2)) = .426077E+09
SOURCE HEIGHT (M) = 3.1700
LENGTH OF LARGER SIDE (M) = 202.0000
LENGTH OF SMALLER SIDE (M) = 200.0000
RECEPTOR HEIGHT (M) = 1.5000
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BOUY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
100.	.8569E+16	5	1.0	1.0	10000.0	3.17	45.
200.	.7027E+16	5	1.0	1.0	10000.0	3.17	45.
300.	.4260E+16	5	1.0	1.0	10000.0	3.17	45.
400.	.3046E+16	5	1.0	1.0	10000.0	3.17	44.
500.	.2345E+16	5	1.0	1.0	10000.0	3.17	44.
600.	.1884E+16	5	1.0	1.0	10000.0	3.17	44.
700.	.1558E+16	5	1.0	1.0	10000.0	3.17	44.
800.	.1316E+16	5	1.0	1.0	10000.0	3.17	44.
900.	.1131E+16	5	1.0	1.0	10000.0	3.17	44.
1000.	.9854E+15	5	1.0	1.0	10000.0	3.17	44.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 100. M:

151.	.9468E+16	5	1.0	1.0	10000.0	3.17	45.
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*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.9468E+16	151.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Laura Hocking/Dawnyelle Addison, Planning DATE: April 26, 2010

FROM: Alicia Stratton

SUBJECT: Request for Review of Administrative Draft Environmental Impact Report (ADEIR) for the Community Memorial Hospital District Development Code, City of Ventura (Reference No. 09-047-1)

Air Pollution Control District staff has reviewed the subject ADEIR, which addresses development of the Community Memorial Hospital District Development Code. The Code is intended to guide redevelopment of ten acres within the Midtown portion of the City of Ventura. Phase I would occur from 2010 to 2014 and would include demolition of nine Project Areas structures (45,506 sq. ft. of commercial/medical office use and four single family residences), construction of the new hospital building (320,000 sq. ft. and a net increase of 12 beds), adaptive reuse of the existing hospital facilities (121,000 sq. ft. for nonessential hospital support services and 104,000 sq. ft. for new backfill medical office reuse), streetscape improvements to streets, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. The surface parking in the southern portion of the plan area would be consolidated and restriped with the addition of a 3,900 sq. ft. retail liner building, which would be constructed adjacent to the location of the future new garage. Phase II would occur over a period of years and would include buildout of the remainder of the hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Phase II development would be about 162,950 sq. ft. of medical office uses. The project area encompasses 15 acres located in the Midtown portion of the City of Ventura and is bounded by Main Street to the west, Loma Vista Road to the north, and Brent Street to the east.

Section 4.2 of the ADEIR addresses air quality issues. We concur with the findings of this analysis, however one item in our October 15, 2009 memo addressing the notice of preparation for the project has not been addressed. We requested that the ADEIR address potential air toxics impacts from the project because the surrounding area contains a large number of sensitive receptors. A screening health risk assessment was advised to evaluate potential air quality impacts from possible exposure to diesel exhaust and particulate matter from earthmoving and excavation equipment and other project-related construction activities. We further requested identification and discussion of mitigation measures if that assessment indicated a significant risk. We again request evaluation of potential air toxics from the project.

If you have any questions, please call me at (805) 645-1426.

Letter 4

COMMENTER: Alicia Stratton, Ventura County Air Pollution Control District

DATE: April 26, 2010

The commenter provided a letter that was issued for the previous Draft EIR. The commenter summarizes the project and requested a screening level health risk assessment. In response to this comment, the DEIR was revised to include a screening level health risk assessment as Impact AQ-4. The document was subsequently recirculated and the APCD responded with additional comments that have also been addressed (please see response to Letter 3).



Ventura County
Watershed Protection District
Planning and Regulatory Division
Permit Section

MEMORANDUM

DATE: September 24, 2010

TO: Laura Hocking, RMA/Planning Technician

FROM: Tom Wolfington, P.E., Permit Manager *JW*

SUBJECT: RMA 09-047-2, NOTICE OF COMPLETION AND AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE PROPOSED COMMUNITY MEMORIAL HOSPITAL DISTRICT DEVELOPMENT CODE (SCH #2009091073), 147 NORTH BRENT STREET, MILLS ROAD DRAIN AND ARUNDELL BARRANCA, ZONE 2

PROJECT LOCATION:

The Project Area is triangular in shape is about 14 acres and is bounded by Loma Vista Road to the north, North Brent Street to the east, and East Main street to the west. The Project Area is primarily comprised of medical uses (including the existing Community Memorial Hospital), commercial uses, and residences that are currently vacant or are used for medical office space.

PROJECT DESCRIPTION:

The proposed Project involves the adoption of the Community Memorial Hospital District Development Code (CMH Code) to guide redevelopment of about 10 acres within the Midtown portion of the City. The Project would be constructed in two phases, discussed in turn below.

Phase 1: Phase 1 would occur from approximately 2010 to 2014 and would include demolition of nine Project Area structures (45,506 sf of commercial/medical office use and 4 single family residences), construction of the new hospital building (356,000 sf and a net increase of 10 beds), adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse), abandonment of portions of existing streets and streetscapes, streetscape improvements, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the plan area would be consolidated and restriped with the addition

of a 3,900 sf retail liner building, which would be constructed adjacent the location of the future new garage and opposite the hospital open space plaza.

Phase II: Phase II would occur over a period of years and would include buildout of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage. Phase II development is estimated to be about 162,950 square feet of medical office uses.

The Project would trigger zoning amendments, including a zone change from Hospital (H), Professional Office (PO), and T5.2 (Urban Center Zone) to Hospital District (SD:H1) and Open Space (OS). In addition, the Project would trigger the following modifications to the Midtown Corridor Code.

- 1) Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the area covered by the Midtown Corridors Development Code
- 2) Designate open space in the area still to be governed by the Midtown Corridors Development Code
- 3) Add a shopfront overlay frontage type to interior street and open space frontages in the area still to be governed by the Midtown Corridors Development Code
- 4) Remove the terminated vistas designation from Borchard Street in the area still to be governed by the Midtown Corridors Development Code.

In addition to the zoning amendments related to the Code, the recirculated DEIR will provide environmental review for site plan approval and design review of the hospital building and other buildings to be constructed in Phase I of the proposed project. The City will also consider a Memorandum of Understanding between the City and Community Memorial Health System regarding various obligations within the Hospital District. The City will also consider a Water Supply Assessment for the Project.

WATERSHED PROTECTION DISTRICT PROJECT COMMENTS:

The site is located more than 4,000 feet from the nearest downstream District jurisdictional red line channels, Mills Road Drain and Arundell Barranca.

The District previously commented on May 3, 2010 on the cumulative impacts section of the Administrative Draft Environmental Impact Report. The Draft Environmental Impact Report includes a revised statement of cumulative impacts. In addressing the District's previous comments, the analysis states "Individual developments would be evaluated on a case-by-case basis to ensure that the post-developed condition does not generate an increase in runoff".

During any subsequent studies or designs, this project and other projects potentially contributing to cumulative impacts will be required to be designed for no net increase in peak runoff in all frequencies.

End of Text

Letter 5

COMMENTER: Tom Wolfington, Ventura County Watershed Protection District

DATE: September 24, 2010

Response 5

The commenter indicates that the Recirculated EIR has addressed the previous District comments by providing additional analysis of cumulative impacts. No additional response is necessary.



VENTURA COUNTY WATERSHED PROTECTION DISTRICT

PLANNING AND REGULATORY DIVISION
800 South Victoria Avenue, Ventura, California 93009
Robin Jester – Permit Manager – (805) 654-3986

DATE: May 3, 2010

Letter 6

TO: Laura Hocking – Case Planner

FROM: Robin Jester

SUBJECT: RMA 09-047-1, NOTICE OF AVAILABILITY OF ADMINISTRATIVE DRAFT ENVIRONMENTAL IMPACT REPORT (ADEIR) FOR THE PROPOSED COMMUNITY MEMORIAL HOSPITAL DISTRICT DEVELOPMENT CODE (SCH #2009091073), 147 NORTH BRENT STREET, MILLS ROAD DRAIN AND ARUNDELL BARRANCA, ZONE 2

Project Location:

The Project Area for the proposed Community Memorial Hospital District (Project) is triangular in shape and comprises the approximately 15 acres located in the Midtown portion of the City bounded to the north by Loma Vista Road, North Brent Street on the east, and East Main Street on the west. The Project Area consists of urban land uses and is primarily comprised of medical uses (including the Community Memorial Hospital), commercial uses, and residences that are currently vacant or are used for medical office space.

Project Description:

This is an Administrative Draft Environmental Impact Report for the proposed Community Memorial Hospital District Development Code (CMH Code, Project). The CMH Code is intended to function as a policy document to guide future improvements to the existing hospital and the surrounding 10 acres within the Midtown portion of the City. The major project objectives are to construct a new seismically conforming hospital building in accordance with state guidelines, consolidate hospital operations into essential and non-essential services, integrate open space and encourage a pedestrian friendly realm, and to manage and expand parking facilities to lessen demand in peripheral residential areas. The redevelopment of the project area would trigger zoning amendments, including a zone change from Hospital, Professional Office, and Urban Center Zone to Hospital District and Open Space. In addition, the Project would trigger modifications to the Midtown Corridor Code including:

1. Designate open space;
2. Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the Midtown Corridors Development Code;

3. Add a shopfront overlay frontage type to interior street and open space frontages;
and
4. Remove the terminated vistas designation from Borchard Street.

The Project is proposed to be constructed in two phases. Phase I would occur between 2010 and 2014 and would include demolition of nine Project Area structures (45,506 sf of commercial/medical office use and four single family residences), construction of the new six-story hospital building (320,000 sf), adaptive reuse of the existing hospital facilities (121,000 sf for non-essential hospital support services and 104,000 sf for new backfill medical office reuse), and streetscape improvements to streets, sidewalks, curbs, medians, and plazas, including finalizing new street extensions. In addition, the surface parking in the southern portion of the Project Area would be consolidated and restriped with the addition of a 3,900 sf retail liner building.

Phase II would occur over a period of years and would include build-out of the remainder of the Hospital District, including remaining liner buildings, development along Loma Vista Road and Brent Street, and the new parking garage (5,850 sf, five-story, 570 spaces). Phase II development is estimated to be about 162,950 sf of medical office uses and does not include the garage.

Comments:

The Administrative Draft Environmental Impact Report (ADEIR) for the above referenced project was prepared by the City of Ventura, Community Development Department with the assistance of Rincon Consultants, Inc. and is dated March 2010. The Watershed Protection District (District) has reviewed the ADEIR, with particular focus on Section 4.6-Hydrology and Water Quality and Appendix H – Preliminary Hydrology and Hydraulic Report. Appendix H contains the Preliminary Hydrology and Hydraulic Report for Community Memorial Hospital prepared by Jensen Design & Survey, Inc. and is dated November 9, 2009. The District was not given the Study to review separately and a review of some of the materials contained in the study does not indicate how various assumptions were made to arrive at the conclusions.

However; the District's previous comments during the Initial Study (IS) review have been adequately addressed in the ADEIR as follows:

Under Section 4.6.2, Impact Analysis, Subsection b. Project Impacts and Mitigation Measures, on page 4.6-7, first paragraph, the ADEIR states that "Since the proposed improvements are similar to the existing condition in terms of impervious area, peak runoff amounts will remain the same as existing runoff amounts,". Under Mitigation Measure HYD-1 – Storm Drain System Improvements on page 4.6-8, the ADEIR states

that "Phase I redevelopment of the site shall include storm drain infrastructure upgrades necessary to ensure that storm water discharges from Phase I and Phase II redevelopment do not exceed the capacity of existing facilities." This clarifies the statement made in the IS that "no increase is anticipated." During any subsequent studies or designs, the project will be required to be designed for no net increase in peak runoff in all frequencies.

In Section 4.6.1, Setting, Subsection b. Drainage, pages 4.6-1 and 4.6-2, the existing infrastructure and drainage patterns for the Project Area are described. Under the Impact Analysis on page 4.6-7, the proposed drainage pattern, infrastructure and improvements are described. Specifically, the ADEIR describes that a portion of an existing 24-inch storm drain line in the alley will be upgraded to a 36-inch line, but will still connect to the existing 36-inch storm drain line in North Brent Street. This explanation provides sufficient information at this time to determine there are no changes proposed to District facilities and also clarifies statements made in the IS that the "project area storm drain system would be designed and constructed to meet current City and RWQCB standards."

The cumulative impacts section was not sufficient in that no development or redevelopment projects in the drainage areas of Mills Road Drain and Arundell Barranca were specifically identified. It is typical in the Cumulative Impacts Section to see identified and listed any specific projects within proximity to the Project Area with a brief explanation of the project and project location. Instead a statement, blanket in nature, was made that the 2005 General Plan would add 8,000 dwelling units and five million square feet of non-residential development within the area under the purview of the City of Ventura. This is not adequate to determine if there are projects anticipated or in the pipeline that would impact the adjacent District facilities.

End of Text

Letter 6

COMMENTER: Robin Jester, Ventura County Watershed Protection District

DATE: May 3, 2010

Response 6

The commenter states that the District's comments on the Notice of Preparation were adequately addressed in the first Draft EIR. The commenter concurs with the Draft EIR analysis regarding existing infrastructure and proposed modifications such that the Project would not alter District facilities. The commenter requested additional analysis of more localized cumulative projects that could have an effect on the District's facilities. This analysis of cumulative effects was provided by adding a new table of development within ½ mile of the project site (Table 3-2) with additional analysis of localized effects on page 4.6-18 in the Recirculated Draft EIR that was evaluated pursuant to the comments provided in Letter 5 (please see Letter 5). The WPD agreed with the updated analysis and no further response is necessary.

From: "Daniel Blankenship" <DSBlankenship@dfg.ca.gov>
To: jlambert@ci.ventura.ca.us
Sent: Wednesday, September 29, 2010 4:43:26 PM
Subject: Community Hospital SCH 2009091073

Dear Mr. Jeff Lambert,

Thank you for the opportunity to review the above referenced DEIR. Because of the existing vegetation on site, the Department recommends bird nest clearance surveys prior to removing vegetation during construction. See reference information below. Also, the Department recommends using drought tolerant native species when possible to reduce water use and facilitate native species diversity even in our Urban landscapes. The Department appreciates the incorporation of green concepts in the project design and recommends using permeable paving and the use of cisterns to collect rainwater for reuse in irrigation of landscaping to further reduce long term impacts to natural resources. Please contact Dan Blankenship, if you have any questions.

- a. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).
- b. Proposed project activities (including disturbances to native and non-native vegetation, structures and substrates) should take place outside of the breeding bird season which generally runs from March 1- August 31 (as early as February 1 for raptors) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86).
- c. If avoidance of the breeding bird season is not feasible, the Department recommends that beginning thirty days prior to the disturbance of suitable nesting habitat the project proponent should arrange for weekly bird surveys to detect protected native birds occurring in the habitat that is to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors) as access to adjacent areas allows. The surveys should be conducted by a qualified biologist with experience in conducting breeding bird surveys. The surveys should continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of clearance/construction work. If a protected native bird is found, the project proponent should delay all clearance/construction disturbance activities within 300 feet of suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests. If an active nest is located, clearing and construction within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at

nesting. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing marking the protected area 300 feet (or 500 feet) from the nest. Construction personnel should be instructed on the sensitivity of the area. The project proponent should record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds.

Daniel S. Blankenship
Staff Environmental Scientist
CA Department of Fish and Game
P.O. Box 221480
Newhall, CA 91322-1480
phone/fax (661) 259-3750
cell (661)644-8469
dsblankenship@dfg.ca.gov

Pursuant to the Governor's Executive Order S-12-10 (<http://www.gov.ca.gov/executive-order/15692/>), beginning August 1, 2010, and until a state budget is enacted and the Director of Finance certifies there are sufficient funds to meet the state's financial obligations, DFG offices will be CLOSED on the second, third and fourth Fridays of each month:

Letter 7

COMMENTER: Daniel Blankenship, California Department of Fish and Game

DATE: September 29, 2010

Response 7.1

The commenter recommends bird nest clearance surveys prior to removing vegetation during construction. Secondly, the commenter recommends use of drought tolerant native species when possible to reduce water use and facilitate native species diversity in urban landscapes. Lastly, the commenter suggest the use of permeable paving and cisterns to collect rainwater for reuse in irrigation landscaping to further reduce long term impacts to natural resources.

The commenter's recommendation to include bird nest clearance surveys will be incorporated as a condition of approval. As the commenter notes, migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests, including raptors and other migratory nongame birds (as listed under the Federal MBTA).

The following Condition of Approval has been added to the Executive Summary in response to this comment.

BIO-1 Nesting Birds. Proposed project activities (including disturbances to native and non-native vegetation, structures and substrates) should take place outside of the breeding bird season which generally runs from March 1- August 31 (as early as February 1 for raptors) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86).

If avoidance of the breeding bird season is not feasible, the Department recommends that beginning thirty days prior to the disturbance of suitable nesting habitat the project proponent should arrange for weekly bird surveys to detect protected native birds occurring in the habitat that is to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors) as access to adjacent areas allows.

The surveys should be conducted by a qualified biologist with experience in conducting breeding bird surveys. The surveys should continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of clearance/construction work.

If a protected native bird is found, the project proponent should delay all clearance/construction disturbance activities within 300 feet of suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests.

If an active nest is located, clearing and construction within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing marking the protected area 300 feet (or 500 feet) from the nest. Construction personnel should be instructed on the sensitivity of the area.

The project proponent should record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds.

The commenter's recommendations for use of drought tolerant native species, permeable paving and cisterns for collection of rainwater that can be reused are noted for consideration. The Master Plan for the Project indicates that streets will be lined with various bio-filter infiltration systems to clean storm water runoff prior to discharge into storm water system. The Master Plan also indicates that parking lots will incorporate permeable paving and french drain techniques to capture pollutants, while development of park areas will improve on site infiltration and capture pollutants from nearby paving and roof drains after an initial rain.

With respect to vegetation, the Master Plan states that the Hospital Plaza will include a rich variety of materials, including trees, plants and other types of preferably native, low-watering and low-maintenance vegetation. The Master Plan further indicates that the street tree planting plan includes gold medallion trees, Mexican fan palms, rainbow eucalyptus, red-flowering gum, and New Zealand Christmas trees, all of which are drought tolerant once established.

Appendix A

*Initial Study and Notice of Preparation
Responses to the Notice of Preparation
Scoping Meeting Information*





CITY OF SAN BUENAVENTURA INITIAL STUDY

I. BACKGROUND:

A. Case No.:

Z-935	Zone Change
EIR-2512	Environmental Review
AO-230	Ordinance Amendment
ARB-3065	Design Review
HPR-46	Historic Resources Report
DA-40	Developer Agreement

B. Lead Agency Name/Address:

City of San Buenaventura
PO Box 99
Ventura, CA 93002

Staff Planner/Telephone Number:

Kaizer Rangwala, Assistant Community
Development Director
Krangwala@ci.ventura.ca.us
805-677-3918

Project Applicant Name/Address:

Community Memorial Health System
147 North Brent Street
Ventura, CA 93003

C. Recommendation:

Based on the information contained in this Initial Study and the findings set forth in Section P. *Mandatory Findings of Significance*, staff has concluded that implementation of the Community Memorial Hospital District Development Code would have a potentially significant effect on the environment and an Environmental Impact Report should be prepared.

D. Project Description:

This initial study analyzes the physical environmental effects associated with the re-development of a 10-acre area in the City of San Buenaventura (City). The proposed project is the Community Memorial Hospital (CMH) District Development Code (CMH Code), which would guide re-development of a 10-acre area located in the Midtown portion of the City and bounded by an alley to the west, Loma Vista Road to the north, and Brent Street to the east. Under the CMH Code, CMH proposes the construction of a new building to house the existing hospital operations. The new building is required pursuant to Senate Bill (SB) 1953, the

Hospital Facilities Seismic Safety Act, which requires hospitals to retrofit their facilities to meet more stringent seismic safety requirements. The building, which would be located behind the existing hospital building along the west side of Brent Street, would be six stories in height with about 356,000 square feet of floor area.

The regional location of the Project Area is shown on Figure 1, while the location of the Project Area within the City of Ventura is shown on Figure 2(a). Figures 2-2(a through c) show how the Project would affect the existing zoning. The CMH Code was designed to be consistent with the existing Midtown Corridor Development Code (Midtown Code), which governs land uses along Main Street. The CMH Code was also designed to be complementary to the existing residential neighborhoods north and east of the Hospital District and to create a mixed use, pedestrian-oriented, and walkable district.

Development accommodated under the CMH Code would include medical related uses, including a new hospital building and adaptive reuse of the existing hospital building. In addition, the CMH Code would accommodate ground level commercial uses and upper level residential development, though only retail, hospital and medical office uses are currently proposed. Aside from the new hospital building, the remainder of the Project Area would be built out over time, potentially by both CMH and private developers. Allowable uses are specified in the CMH Code (see Table 1). Figure 3 shows existing zoning within the Project Area, while Figure 4 shows the proposed zoning.

Table 1
Allowed Land Uses & Permit Requirements
for Hospital District Zones

Land Use	Zone		Additional Regulations
	SD:H1	OS	
Industry, Manufacturing & Processing, Wholesaling			
Laboratory – Medical, analytical	P(2)	---	
Printing and publishing	P(2)	---	
Research and development	P	---	
Recreation, Education & Public Safety			
Adult Business	---	---	
Community Meeting	P	---	ZO 24.480
Health; fitness facility / Indoor sports & recreation	P	---	
Library, museum	P	---	
Live entertainment	UP	---	
Public parks and playgrounds	P	P	
School, public or private	UP	---	
Studio – Art, dance, martial arts, music, etc.	UP	---	
Hospital Residential			
Dwelling, Multi-unit	P		
Dwelling, Accessory /Carriage house	---	---	

Table 1
Allowed Land Uses & Permit Requirements
for Hospital District Zones

Land Use	Zone		Additional Regulations
	SD:H1	OS	
Dwelling – Single dwelling	---	---	
Home occupation	P	---	
Live/work	P	---	
Special Residence	P	---	
<i>Retail</i>			
Bar, tavern, night club	UP	---	ZO 24.460
Gas Stations	---	---	
General Retail, except with any of the following features	P	---	
Alcoholic Beverage Sales	UP	---	ZO 24.460
Auto – or motor-vehicle related sales or services	---	---	
Drive-through facility	---	---	
Floor area over 20,000 sf	---	---	
Operating between 11:00 pm and 7:00 am	UP	---	
Restaurant	P	---	
<i>Services – Business, Financial, Professional</i>			
Bank, financial services	P	---	
Business support service	P	---	
Medical/Dental	P	---	
Office	P	---	
<i>Services – General</i>			
Catering Service	P(2)	---	
Day care	P	---	
Drive – through service	---	---	
Lodging	P	---	
Mortuary, funeral home	---	---	
Personal services	---	---	
Safety services	P	---	
<i>Transportation, Communications, Infrastructure</i>			
Helicopter landing services	UP	---	
*Parking facility, public or commercial	P	---	
*Wireless telecommunications facility	P	---	ZO 24.497 (3)
*Transit station or terminal	P	---	
*Utility equipment or substation	P	---	
<i>Parks and Open Space</i>			
Outdoor Dining	P	P	
Outdoor sports/recreation facilities	---	P	
Outdoor entertainment	---	P	
Farmer's Market	UP	UP	

Source: Community Memorial Hospital District Development Code, Table 203.030

SD:H1 = CMH - Hospital District; OS = Open Space; P= Permitted Use; UP = Use Permit Required; --- = Not

Table 1
Allowed Land Uses & Permit Requirements
for Hospital District Zones

Land Use	Zone		Additional Regulations
	SD:H1	OS	

Allowed: (2) = Use not allowed on ground floor were frontage overlays occur, see Section 24.102 of the Regulating Plan: (3) Use Permit as may be required by ZO 24.497: () Use allowed but must be screened from public view.*

Zoning Classifications. The following zoning classifications would be assigned to properties within the Project Area as part of the proposed CMH Code. The proposed zones are shown on Figure 4.

Midtown Corridor Code Zone (T.5.2). This area is regulated by the Midtown Corridors Development Code. Development within this zone would be consistent with the Urban Neighborhood Center Zone as allowed by the Midtown Corridor Development Code.

SD:H1. This new zoning classification would include form based requirements that would be applicable within the Project Area. Development allowed under this zone would include laboratory, printing and publishing, research, education, recreation, public safety, hospital residential, retail, services, transportation, communications, and infrastructure.

OS. The OS zone would be added to the Midtown Code as part of the proposed CMH Code. This new zoning classification would allow for public open spaces, including squares and plazas. Three open space areas are identified under the CMH Code, one of which would be located within the Midtown Code boundary.

Frontage Overlay. As identified in the CMH Code, the public portions of a parcel's frontage, except alleys, shall include at least one of the following frontage types: Shopfront, Gallery, or Arcade (per section 24SD:H1.204).

Forecourt frontage type is permitted where façade is set back 5' or more. (per section 24SD:H1.204)

A "Porch" frontage is permitted for lots directly fronting a park (no intervening streets are present). Porch frontage shall comply with standards from the Midtown Corridors Development Code.

Circulation. Circulation within the Project Area would involve modifications to the existing street system, including realignment of Cabrillo Drive about 50 feet south of the existing intersection of Brent Street and Cabrillo Drive. The new Cabrillo Drive would extend westward to the new hospital building entrance and would branch to two streets, one branch is the existing Cabrillo Drive and the other branch would be located south of the existing Cabrillo Drive. Both of the branches of Cabrillo Drive would outlet at Main Street. Virginia Drive currently terminates at Loma Vista Drive,

to the north of the Hospital District. Implementation of the CMH Code would include extending Virginia Drive southwesterly to connect to Borchard Drive. Short term development would involve surface parking that would eventually be replaced by a new 600-space parking garage, which would be constructed in the southern portion of the Hospital District and would be accessed by the new Cabrillo Drive alignment. The existing parking garage located off of Loma Vista Road would remain. A landscaped parking court would be constructed to the east of the existing parking garage and would be accessible from Loma Vista Road.

Allowable heights within the Project Area range from a minimum of 25 feet to a maximum height of 130 feet. The uses that would accommodate heights of 130 feet would include the existing and proposed hospital facilities. The buildings that would accommodate lower heights would include buildings with frontages along Loma Vista Road and along Brent Street. Redevelopment along Main Street per the Midtown Code would allow for development of up to six stories in height.

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors highlighted in **bold** below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages:

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

III. PROJECT SCOPE:

- 1. Location and Hospital District Land Uses:** The Hospital District comprises about 10 acres of developed land (not including public right-of-way) located in the Midtown portion of the City. The Hospital District is roughly triangular in shape and is bounded by Loma Vista Road to the north, North Brent Street to the east, and an alley to the west. The Hospital District is primarily comprised of medical uses (including the Community Memorial Hospital), commercial uses, and residences. The existing Community Memorial Hospital facility is located in the northeast portion of the Hospital District. The residences are located in the southern portion of the Hospital District, bounded by Cabrillo Drive, Main Street, and Brent Street. Additionally, one medical office building is located in the southern portion of the Hospital District. Commercial land uses in the Hospital District are located in the western portion of the Hospital District, with frontages on East Main Street. The location of the Hospital District is depicted on figures 2-1 and 2-2 in EIR Section 2.0, *Project Description*.

2. Assessor's Parcel Numbers:

077-0-011-010	077-0-021-040	077-0-021-030	077-0-022-140
077-0-011-020	077-0-021-050	077-0-022-210	077-0-011-370
077-0-011-030	077-0-022-010	077-0-021-020	077-0-011-380
077-0-011-150	077-0-022-020	077-0-022-170	077-0-022-150
077-0-011-230	077-0-022-030	077-0-021-010	077-0-011-360
077-0-011-240	077-0-022-040	077-0-022-160	077-0-022-130
077-0-011-250	077-0-022-050	077-0-011-410	077-0-022-080
077-0-011-290	077-0-022-060	077-0-022-120	077-0-011-350
077-0-011-330	077-0-022-070	077-0-011-400	

3. Adjacent Land Uses: The Hospital District is predominantly surrounded by commercial, residential, and medical uses. Medical office buildings are adjacent to the Hospital District on the east and on the north, with frontages on Brent Street and Loma Vista Road. Residential neighborhoods near the Hospital District are located to the east and north. Commercial uses in the Hospital District vicinity include primarily retail and restaurant uses located on Main Street and Loma Vista Road, to the west and north of the Hospital District.

4. General Plan Land Use Designation: According to the 2005 City of Ventura General Plan, the Hospital District is located within the Loma Vista Road, Telegraph Road and Main Street corridor zones. The Hospital District includes public and institutional, commerce, and residential low (up to 8 du/ac) land use designations.

5. Current and Proposed Zoning: The Hospital District currently includes the following three zoning designations: Hospital (H), Professional Office (P-O) and Urban Neighborhood Center (T5.2). Properties within the Hospital District that have T5.2 zoning designations are within jurisdiction of the Midtown Code. In EIR Section 2.0, Project Description, Figure 2-5 shows the existing zoning of the Hospital District, while Figure 2-6 shows the proposed zoning. In EIR Section 2.0, Project Description, Figure 2-2(b-c) shows how the Midtown Code boundary would be shifted westward under the CMH Code. The commercial properties on the western portion of the Hospital District, including buildings with frontages on Main Street and buildings with frontages on Loma Vista Road near Main Street, would be regulated by the Midtown Code. The properties that would be regulated under the CMH Code would be assigned a designation of either SD:H1 (Hospital District), OS (Open Space), or Midtown Corridor Code, as shown on Figure 2-6. Allowable uses within the areas regulated by the CMH Code would include those shown in Table 1.

6. Discretionary Permits and Approvals Required:

- *Certification of the EIR*
- *Development Code Adoption*
- *Modification of the Midtown Corridors Development Code to:*
 - 1) *Designate open space;*

- 2) *Move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District from the Midtown Corridors Development Code (see Figure 2-6);*
 - 3) *Add a shopfront overlay frontage type to interior street and open space frontages (see Figure 2-6); and*
 - 4) *Remove the terminated vistas designation from Borchard Street.*
- *Zone Change from H, P-O and T5.2 to SD:H1 and OS*
 - *Project approvals for the new hospital building and ancillary projects under the Plan and Code as they are proposed*
 - *Design Review*
-

IV. CONCLUSION AND ACTION:

On the basis of the information contained in this Initial Study/Environmental Assessment, the Planning Commission finds that:

- ☐ The proposed project is EXEMPT from further CEQA review under Section _____ of the state CEQA Guidelines.
- ☐ The project, as proposed, WOULD NOT have a significant effect on the environment, and a PROPOSED NEGATIVE DECLARATION will be prepared and forwarded to the Planning Commission for approval of a FINAL NEGATIVE DECLARATION.
- ☐ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the attached mitigation measures and monitoring program have been added to the project. A PROPOSED MITIGATED NEGATIVE DECLARATION will be prepared and forwarded to the City Council for approval of a FINAL MITIGATED NEGATIVE DECLARATION.
- ☐ The proposed project MAY have a significant effect on the environment and an EXPANDED INITIAL STUDY/ENVIRONMENTAL ASSESSMENT will be prepared to address:
- ☒ The proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT should be prepared.
- ☐ The proposed project is a SUBSEQUENT USE of a previously prepared EIR and any environmental impacts have been addressed in EIR-_____.
- ☐ On the basis of the information contained in the Initial Study, and on the record as a whole, a finding has been made that there is no evidence that there will be an adverse effect on fish or wildlife habitats or resources pursuant to Section 3 of

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factor as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including offsite as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) Negative Declaration: “Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion within this Initial Study identifies the following:
 - a) The earlier analysis used and where it is available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) The explanation of each issue should identify: a) The significance criteria or threshold, if any, used to evaluate each question; and b) the mitigation measure identified, if any, to reduce the impact to less than significance

This Initial Study has been prepared in accordance with the CEQA Guidelines and relevant provisions of the California Environmental Act (CEQA) of 1970, as amended. Section 15063(c) of the CEQA Guidelines defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. Among the purposes of an Initial Study are:

- 1) To provide the Lead Agency (the City of San Buenaventura) with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration;
 - 2) To enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR (if possible); and
 - 3) Assist in the preparation of an EIR, if one is required.
-

V. ENVIRONMENTAL IMPACT EVALUATION:

(References used to respond to the topic areas in Section II include those that are identified by capital letters in Section VII of this Initial Study. If emphasis is placed on a particular reference, the capital letter corresponding to that reference may be noted in parenthesis beneath each topic area heading.)

A. Aesthetics:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect on a scenic vista?	X			
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
3. Substantially degrade the existing visual character or quality of the site and its surroundings?	X			
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	X			

Impact Discussion:

1. Scenic views accessible through the Project Area include hillsides to the north. Development facilitated by the proposed CMH Code could block views to hillsides from certain public vantage points. This is a **potentially significant** impact and further analysis in an EIR is required.
2. The proposed CMH Code would not facilitate development within the vicinity of an officially designated State Scenic Highway. The Project Area is located about one mile from U.S. 101, which is eligible for designation as a Scenic Highway (A). However, views from U.S. 101 toward the Project Area are obscured by vegetation and grade changes. Further, development facilitated by the CMH Code would not block views of scenic resources, trees, rock outcroppings, or historic buildings. Therefore, **no impacts** would occur and further analysis in an EIR is not warranted.
3. Development within the Project Area would change the visual condition of the site through demolition of existing structures and construction of new structures. The

CMH Code would facilitate construction of a 365,000 sf hospital facility with a maximum allowable height of 130 feet. This addition would alter the existing height and massing of the Project Area and surrounding areas. Development facilitated by the CMH Code would alter the type and appearance of development on the site, and would introduce a larger scale of development to the immediate neighborhood. Therefore, impacts to the visual character and quality of the Project Area are **potentially significant** and further analysis in an EIR is required.

4. CMH Code implementation would introduce development that would add sources of lighting. The new hospital building would add lighting at a higher elevation, including aviation warning lights, making the hospital facility more visible than under existing conditions. Further, additional street lighting would be required. The introduction of new lighting has the potential to result in **potentially significant** impacts. Therefore, further analysis in an EIR is required.

Mitigation/Residual Impact(s): Based on the above discussion, the proposed project would have potentially significant impacts related to aesthetic resources. Further analysis in an EIR is required to determine the severity of these impacts.

B. Agricultural Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
3. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				X

Impact Discussion:

- 1–3. There is no land either designated or used for agriculture within or adjacent to the

Project Area (A). **No impact** to agricultural resources would occur and further analysis of this issue in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would have a less than significant impact with regard to Agricultural Resources. No mitigation measures are required.

C. Air Quality:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Conflict with or obstruct implementation of the applicable air quality plan?	X			
2. Violate any air quality standards or contribute substantially to an existing or projected air quality violation?	X			
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	X			
4. Expose sensitive receptors to substantial pollutant concentrations?	X			
5. Create objectionable odors affecting a substantial number of people?				X

Impact Discussion:

1. Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. The population forecasts upon which the Ventura County Air Quality Management Plan (AQMP) is based are used to estimate future emissions and devise appropriate strategies to attain state and federal air quality standards. The Ventura County Air Pollution Control District (APCD) adopted an updated AQMP in May 2008. When population growth exceeds the forecasts upon which the AQMP is based, emission inventories could be surpassed, which could

affect attainment of standards. The 2005 General Plan FEIR acknowledged an unavoidably significant impact with respect to population forecasts in excess of those in the AQMP and a Statement of Overriding Considerations was adopted by the City Council. Impacts are **potentially significant** and this issue will be studied in an EIR.

- 2-3. The Project Area is located within the Ventura County portion of the South Central Coast Air Basin. The Ventura County APCD is the designated air quality control agency in the Ventura County portion of the Basin. The Ventura County portion of the South Central Coast Air Basin is a state and federal non-attainment area for ozone and a state non-attainment area for suspended particulates (PM₁₀). Development facilitated by the proposed CMH Code would generate temporary construction emissions and long-term emissions primarily associated with increased vehicle trips and energy consumption. Impacts to air quality associated with temporary and long-term emissions, including cumulative impacts, are considered **potentially significant** and this issue will be studied in an EIR.
4. The closest sensitive receptors within the Project Area are patients of the hospital and patients at medical offices. The closest sensitive receptors outside of the Project Area include patients at medical offices adjacent to the Project Area on the north and east and residences to the north and east of the Project Area. Demolition of the existing structures and construction of the structures facilitated by the CMH Code would generate temporary increases in emissions of ozone precursors and fine particulates (dust). This would temporarily increase air pollutant concentrations within the Project Area and on adjacent residential and medical office properties. In addition, asbestos-containing materials and lead-based paint could be present in the existing site structures, which could be released during demolition. Impacts are **potentially significant** and will be analyzed in an EIR.
5. The proposed CMH Code would intensify an already built environment. Hospital, residential, park and commercial development facilitated under the CMH Code would not generate objectionable odors affecting a substantial amount of people. Therefore, **no impact** would occur and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, the proposed project would have potentially significant impacts related to air quality. Further analysis in an EIR is required to determine the severity of these impacts.

D. Biological Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species				X

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
3. Have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means?				X
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
5. Conflict with local, regional, or state conservation plans or other local policies or ordinances protecting biological resources?				X

Impact Discussion:

1-4. The Project Area and its surroundings are highly urbanized and generally lack native biological habitats. The Project Area is surrounded by commercial, institutional, and residential land uses that contain little to no habitat. No portion of the Project Area or surrounding properties contains wetland or riparian habitat, a native plant or animal community, or water body or watercourse (B). The lack of natural habitat also results in the absence of any unique, rare, threatened, or endangered animal or plant species or their critical habitat. There would be **no impact** to biological resources and further analysis of this issue in an EIR is not warranted.

5. The Project Area does not contain any land that is part of an adopted conservation

plan, and the project does not conflict with local policies or ordinances protecting biological resources (A, C). **No impact** is anticipated and further analysis of this issue in an EIR is not warranted.

Mitigation/Residual Impact(s): CMH Code implementation would have no impact with regard to Biological Resources. No mitigation measures are required.

E. Cultural Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	X			
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
4. Disturb any human remains, including those interred outside of formal cemeteries?			X	

Impact Discussion:

1. No designated historic resources are located on or adjacent to the Project Area. However, a number of structures within the Project Area are more than 40 years old. Nine Project Area structures would be demolished to facilitate construction of the proposed new hospital. Demolition of a structure that could be eligible for historic resource protection would constitute a significant impact. The impact to historic resources is considered **potentially significant**, pending further investigation in an EIR.
- 2-4 The Project Area is within a highly urbanized portion of Ventura and has been extensively graded to accommodate past and current development. There are no known archaeological or paleontological resources or human remains present within the Project Area. However, during earth moving activities, as yet undiscovered archaeological resources may be found. In the unlikely event that such resources are unearthed during excavation and grading, adherence to applicable regulatory requirements, including state laws pertaining to the handling and treatment of such

resources would ensure that impacts would be **less than significant**. General Plan Action 9.15 directs to “*Suspend development activity when archaeological resources are discovered, and require the developer to retain a qualified archaeologist to oversee handling of the resources in coordination with the Ventura County Archaeological Society and local Native American organizations as appropriate.*” In addition, Section 7050.5 of the California Health and Safety Code requires notification of the County Coroner in the event that human remains are found, with subsequent notification of the Native American Heritage Commission if the remains are determined to be those of Native American descent. Therefore, further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, Development Code implementation would have potentially significant impacts related to historic resources but would have less than significant impacts related to archaeological and paleontological resources or human remains. Adherence to applicable regulatory requirements would eliminate the need for mitigation measures. Nevertheless to assist in monitoring compliance with these directives, the following conditions of approval are recommended.

ARCH-1 Pre-Construction Training. Prior to any earth disturbance or grading, a professional archaeologist shall be retained by the developer to address machinery operators and their supervisors by giving an on-site talk to the peoples who will perform the actual earth-moving activities. This will alert the operators to the potential for finding historic or pre-historic cultural resources.

ARCH-2 Archaeological Resources. Should unanticipated cultural resource remains (cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits) be encountered during land modification activities, work must cease, and the Planning Director shall be contacted immediately. The developer shall retain a qualified archaeologist to oversee handling of the resources in coordination with the Ventura County Archaeological Society and Native American organizations as appropriate.

ARCH-3 Human Remains. If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone

within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of the Native American Heritage Commission.

F. Geology and Soils:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: a. Rupture of a known earthquake fault?				X
b. Strong seismic ground shaking?			X	
c. Seismic-related ground failure, including liquefaction or landslides?			X	
d. Seismic-related inundation from tsunami or seiche?				X
2. Result in substantial soil erosion or loss of topsoil?			X	
3. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
4. Be located on expansive soil creating substantial risk to life or property?			X	
5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

Impact Discussion:

- 1^a No known faults cross the Project Area and the Project Area does not lie within a known fault hazard zone (A). The closest fault is the Ventura-Foothill fault and fault zone, located approximately 0.4 miles north of the Project Area (A). Other faults in close proximity to the Project Area are the Oak Ridge fault and the McGrath fault. These local faults are classified as active or potentially active. Potentially significant adverse impacts would occur if structures were proposed for construction overlying a fault due to the potential for surface rupture. However, because no faults are located within the boundaries of the Project Area, there would be **no impact**. Therefore, further analysis in an EIR is not warranted.
- 1^b Future seismic events could produce ground shaking throughout the City, including within the Project Area. Ground shaking could damage structures and/or create safety hazards. However, compliance with requirements of the California Building Code (CBC) and the Uniform Building Code (UBC) would reduce impacts to a **less than significant** level. Additionally, the proposed hospital facility would be designed in accordance with SB 1953 and would be required to meet seismic safety standards. These standards would ensure that acute-care inpatient facilities would continue to function after a seismic event. Compliance with these seismic standards would result in a **less than significant** impact. Therefore, further analysis in an EIR is not warranted.
- 1^c Liquefaction typically occurs in areas where the soils are composed of poorly consolidated fine to medium sand. Based on a soil survey from the U.S. Department of Agriculture, Project Area soils consist of Sorrento loam (E). This soil is a well drained loam that does not have substantial liquefaction potential. Prior to issuance of a building permit, the City Building Official may require additional conditions related to foundation design and construction for high-risk structures, even though liquefaction potential is low within the Project Area. In addition, the proposed new hospital facility would be constructed based on seismic safety regulations as required by SB 1953. Impacts associated with liquefaction would be reduced to a less than significant level. Therefore, impacts would be **less than significant** and further analysis in an EIR is not warranted.
- 1^d The Project Area is not located within a designated tsunami or seiche inundation area (A). Thus, there would be **no impact** from these hazards and further analysis in an EIR is not required.
2. The Project Area is generally flat, sloping gently to the southwest. Grading activities facilitated by the proposed CMH Code would involve excavation, which would require soil hauling. Soil hauling has the potential to entrain soil onto City streets. The loss of topsoil from site preparation would be addressed through standard erosion control BMPs that are required during project construction. Therefore, impacts would be **less than significant** and further analysis in an EIR is not warranted.
3. See Items 1(b), 1(c), and 2. Impacts would be **less than significant** and further analysis in an EIR is not warranted.

4. Soil expansion hazards within the Project Area are considered moderate (A). Therefore, expansive soils or other soil conditions leading to subsidence could result in foundation and building distress problems and cracking of concrete slabs. Structures constructed in the Project Area would be required to comply with CBC and UBC standards for safe construction and General Plan Action 7.7, which requires project proponents to perform geotechnical evaluations and implement mitigation prior to development of any site that is located in a zone containing moderate or high risk of expansive soils. Therefore, impacts would be **less than significant** and further analysis in an EIR is not warranted.
5. The proposed project would utilize the existing sewer system maintained by the City. No septic or alternative sewer system is proposed. Therefore, **no impact** would result and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would have a less than significant impact with regard to Geology and Soils. No mitigation measures are required.

G. Hazards and Hazardous Materials:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
5. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
6. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Impact Discussion:

1,2. Development facilitated by the CMH Code would include a new hospital facility and adaptively reuse of the existing hospital facility. Hospital facilities use substances that may be classified as hazardous materials. These include the following:

Helium	Potassium Hydroxide
Sodium Hydroxide	Cyclohexylamine Morpholine
Sodium Megabisulfite/Potassium Sulfite	Sodium Sulfite

The existing hospital facility currently uses hazardous materials. Development of a new hospital and reuse of the existing hospital may result in an incremental increase in the use of these materials. However, hazardous materials would be required to be disposed in compliance with the State of California Medical Waste Management Act of 1990, which requires the preparation of a Medical Waste Management Plan. The Ventura County Environmental Health Division monitors compliance with the Medical Waste Management Act through the permit process and enforces compliance through the Ventura County Ordinance Code, Division 4 Public Health, Chapter 5 Hazardous Waste, Article 3 Medical Waste Management. The Ventura County Environmental Health Division has a compliance manual (http://www.ventura.org/rma/envhealth/programs/med_waste/handbook/MW%20handbook.pdf) that documents containment and storage requirements, transportation requirements, and disposal requirements for different types of waste. Hazardous substances would be disposed of in compliance with the State of California Medical Waste Management Act of 1990. Impacts would

be **less than significant** with adherence to applicable policies and further analysis in an EIR is not warranted.

3. Development facilitated by the proposed CMH Code would include the handling of potentially hazardous materials used for medical purposes within one quarter mile of three schools, including Will Rodgers Elementary, Our Lady of the Assumption and Saint Bonaventure High School. The closest school is 800 feet away. However, the handling of such materials would occur within the hospital facility and hazardous materials would not be emitted on or near school facilities. The handling of potentially hazardous materials would occur in accordance with current practices and applicable regulations. Based on the above, medical wastes utilized in the vicinity of the site are handled such that risks to health workers and patients are minimized. Impacts to schools and students located more than 800 feet away would be less than significant. Therefore, impacts would be **less than significant** and further analysis in an EIR is not warranted.
4. The Project Area was checked for inclusion in the Department of Substances Control (DTSC) Envirostor database (L), EPA Geotracker database (M), and EPA Enviromapper database (N). The records search indicated that the Community Memorial Hospital site had a Leaky Underground Storage Tank (LUST) (A). However, remediation was completed and the case was closed on February 18, 1994. Therefore, there would be **no impact** and further analysis in an EIR is not warranted.
5. Site access as proposed under the CMH Code would not interfere with emergency response or evacuation. In addition, the proposed project involves construction of a replacement hospital building that would be designed to facilitate emergency access. Hospital District roadways would be enhanced with an additional outlet to Main Street and the extension of Virginia Drive. Therefore, emergency access is anticipated to improve with development of the Project Area. **No impact** would occur and further analysis in an EIR is not warranted.
6. The Project Area is located in a developed portion of Ventura and is not within a wildland area. Therefore, **no impact** would occur with respect to wildland fires and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, impacts associated with the proposed project would be less than significant. Therefore, mitigation is not required.

H. Hydrology and Water Quality:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Violate any water quality standards or waste discharge requirements?			X	

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?			X	
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site?			X	
4. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		X		
5. Otherwise substantially degrade water quality?			X	
6. Place housing within a 100-year flood plain?				X
7. Place within the 100-year flood plain structures that would impede or redirect flood flows?				X
8. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, or involving inundation by seiche, tsunami, or mudflow?				X

Impact Discussion:

1. The CMH Code would facilitate retention and treatment facilities, including infiltration systems, open space, and a storm water treatment system (O). The Ventura County National Pollution Discharge Elimination System (NPDES) permit for municipal storm

water runoff applies to the Project Area. The conditions of the Ventura County NPDES permit would require property owners to limit the volume of contaminants entering the storm drain system. Retention and treatment facilities would allow the Project Area to meet NPDES requirements. Impacts would be **less than significant** with mandatory compliance with NPDES requirements. Further analysis in an EIR is not warranted; however, additional discussion regarding compliance with NPDES requirements is contained in EIR Section 4.6, *Hydrology and Water Quality*.

2. The CMH Code would facilitate redevelopment of an existing developed area. Redevelopment would be anticipated to utilize water, similar to current conditions; however, it would not be anticipated to substantially deplete the existing groundwater supply or interfere with groundwater recharge. Conversely, the Project Area would increase groundwater recharge by replacing current impervious surfaces with landscaped open space. Impacts would be **less than significant** and further analysis in an EIR is not warranted. Additional discussion regarding water supply is contained in Section O. *Utilities and Service Systems*.
3. The 2000 Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) requires proposed developments to “control the post-development peak storm water runoff discharge rates to maintain or reduce pre-development downstream erosion and to protect stream habitat.” .

Redevelopment under the CMH Code would not substantially alter the existing drainage pattern on the Project Area. In addition, the CMH Code will not increase the rate or amount of surface runoff from the Project Area. Therefore, impacts would be **less than significant** and further analysis in an EIR is not warranted. However, some upgrades and replacement of infrastructure will be necessary. Therefore, this issue is further evaluated in EIR Section 4.6, *Hydrology and Water Quality*.

4. Currently, stormwater runoff from the Project Area is accommodated by the City storm drain system, consisting of a series of catch basins and reinforced concrete pipes (RCP). The project area system feeds into a 36-inch RCP beneath North Brent Street. This pipeline connects with storm drain systems on Telegraph, Thompson, and Main Street. The system carries storm water southeast in a 68 inch RCP, south down Mills Road in the Mills Road Drain (a jurisdictional redline channel), and into Arundell Barranca (a jurisdictional redline channel)(P). The Watershed Protection District has permitting authority for work in, on, over, under, and across these facilities. District facilities are shown on a map in Attachment A to this report.

Development facilitated under the CMH Code does not include any modifications to District facilities and would replace existing above ground impervious development with new above ground impervious development. Development under the CMH Code would not increase the amount of impervious surfacing on the Project Area and will reduce the impervious area slightly through the construction of new open space areas. This will reduce the impervious surface from 85% under the existing condition to 78% under the improved condition. Development under the CMH Code would not involve work in, on, over, under or across District facilities.

Grading associated with redevelopment will modify the existing watershed areas and drainage patterns within the Project Area. Some upgrades and improvements will be necessary to ensure that facilities are sized appropriately to capture runoff from the modified watershed areas. The impact is **potentially significant unless mitigated**. This issue will be further discussed in EIR Section 4.6, *Hydrology and Water Quality*.

5. See item one above.

6, 7. The Project Area is not located within a 100-year floodplain and is not located near any watercourse, as indicated by FEMA's Flood Insurance Rate Map (panel 060419-0005-B) (Q). Therefore, **no impact** would occur and further analysis in an EIR is not warranted.

8. According to the 2005 General Plan EIR, the Project Area is not located within a dam inundation, tsunami or mudslide zone (A). Therefore, **no impact** would occur and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would have a less than significant impact with regard to Hydrology and Water Quality. As such, no mitigation measures are required.

I. Land Use and Planning:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Physically divide an established community?			X	
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, a specific plan, local coastal program, Hillside Management Program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an			X	

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
environmental effect?				
3. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Impact Discussion:

1. The Project Area currently contains a hospital, medical offices, commercial uses, and residences. Land uses surrounding the Project Area include commercial uses, medical offices, and residences. The CMH Code would facilitate redevelopment of an area already containing medical office and hospital type uses, also integrating planned streetscapes, open spaces and supporting commercial retail development. Implementation of the CMH Code would not physically divide an established community. Furthermore, the CMH Code was designed to be compatible with the Midtown Code and surrounding residential areas. There would be a **less than significant** impact with respect to physical division of an established community and further analysis in an EIR is not warranted.
2. The Project Area is located in the City of Ventura and is subject to the City's 2005 General Plan. In addition, a portion of the Project Area is subject to the Midtown Code. General Plan land use designations within the Project Area include Commerce, Neighborhood Low (up to 8 du/acre), and Public and Institutional designations. Zoning Designations within the Project Area include Hospital (H), and Professional Office (P-O). Midtown Code zoning designations include Urban Neighborhood Center (T5.2) and a Residential Overlay (2). Figure 3 shows existing zoning within the Project Area.

The CMH Code includes the following zoning designations: Hospital District (SD:H1), and Open Space (OS). The Midtown Code would be modified by the CMH Code in the following ways, which would be implemented through an amendment to the Midtown Code.

- 1) designate open space;
- 2) move the Midtown Corridors boundary to the west, thereby excluding the proposed Hospital District and associated open space from the Midtown Corridors Development Code; and
- 3) add a shopfront overlay frontage type to interior street and open space frontages

In addition, the CMH Code would require zoning changes from H, P-O and T5.2 to SD:H1 and OS. Figure 4 shows the proposed Project Area zoning. With approval of

these modifications to the Midtown Code and the associated zone changes within the Project Area, the proposed Code would not have any conflicts with applicable land use plans or policies and the impact would be **less than significant**. Further analysis in an EIR is not warranted.

3. As described in the Biological Resources section above, the Project Area does not include and is not located near wetland or riparian habitat, native plant or animal communities, or a water body or watercourse. Therefore, there are no unique, rare, threatened, or endangered animal or plant species or critical habitat on the Project Area. The Project Area is not subject to a habitat conservation plan or natural community conservation plan. **No impact** would occur and further analysis in an EIR is not warranted.

Mitigation/Residual Impacts: Based on the above discussion, CMH Code implementation would have a less than significant impact with regard to Land Use and Planning. No mitigation measures are required.

J. Mineral Resources:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Result in the loss of availability of known mineral resource that would be of value to the region and the residents of the state?				X
2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on the General Plan, specific plan, or other land use plan?				X

Impact Discussion:

- 1, 2. The 2005 General Plan FEIR indicates no known mineral resources within the Project Area. **No impact** would occur and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would have a less than significant impact with regard to Mineral Resources. As such, no mitigation measures are required.

K. Noise:

Would the project result in:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Exposure of persons to a generation of noise levels in excess of standards established in the General Plan or noise ordinance?	X			
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X			
3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			

Impact Discussion:

- 1,2,4. Project Area site preparation and construction activities would generate temporary increases in noise within the Project Area and at adjacent properties, including groundborne vibrations. Noise levels during construction could potentially be in the 78-88 dBA range during peak activity periods (R). Such levels are substantially higher than ambient noise levels in the Project Area vicinity and would be a source of temporary noise annoyance to hospital patients, nearby medical office patients and adjacent residents. Impacts would be **potentially significant** pending further investigation and will be analyzed in an EIR.
3. The main sources of noise in the Project Area are traffic and emergency vehicles traveling on Loma Vista Road, North Brent Street, and Main Street. Intensification of uses within the Project Area could result in increased vehicle trips, which could increase noise levels. Impacts are **potentially significant** pending further investigation and will be analyzed in an EIR.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would result in potentially significant impacts related to noise. Further analysis in an EIR are required.

L. Population and Housing:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Induce substantial population growth in an area, either directly or indirectly?			X	
2. Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?				X

Impact Discussion:

1. The Project Area is currently developed with commercial, institutional, and residential uses. Development facilitated under the CMH Code would accommodate a new hospital facility, adaptive reuse of the existing hospital facility, commercial, institutional, office, and residential uses. However, it is anticipated that any population growth associated with area development would be within the growth parameters considered in the 2005 General Plan. Therefore, the CMH Code would not induce substantial direct population growth.

The proposed hospital facility would not induce substantial indirect population growth because it would be replace the existing facility and would not facilitate a substantial increase in patients or jobs. Retail jobs that could be generated by future development would be expected to be filled by the local work force. Impacts related to direct and indirect population growth would be **less than significant** and further analysis in an EIR is not warranted.

2. Development facilitated by the CMH Code would include the demolition of four residential units that are not currently inhabited (B). Therefore, implementation of the proposed CMH Code would not displace people or a substantial amount of existing housing. **No impact** would occur and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would result in no impacts with regard to Population and Housing. As such, no mitigation measures are required.

M. Public Services & Recreation:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following:				
a. Fire protection?			X	
b. Police protection?			X	
c. Schools?			X	
d. Neighborhood or regional parks or other recreational facilities?			X	
e. Maintenance of public facilities including roads?			X	
2. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
3. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Impact Discussion:

- 1^a. The City of Ventura Fire Department (FD) provides fire protection service to the City. The FD is staffed by 73 sworn and 27 non-sworn personnel, and divided into three Divisions—Operations, Administration, and Inspection Services (S). The Operations Division is responsible for activities and emergency responses of the Department's firefighting force. The FD Fire Suppression Division provides direct responses to fire, emergency medical, hazardous material, hazardous conditions and public service

incidents from six fire stations. All fire-fighting personnel are certified medical technicians. Each fire station maintains one engine company, with the exception of Fire Station 5, which also houses a truck company. The FD maintains a countywide mutual aid agreement with all fire protection agencies within Ventura County. This agreement has been arranged between the FD and other fire agencies to facilitate response to large isolated incidents such as earthquakes and wild fires, and does not include daily operations under normal conditions. The Project Area is located within the service area of Station 2, which is located at 41 S. Seaward Avenue, approximately a half mile from the Project Area.

The Project Area is currently served by Station 2 and the Project Area is within the desired 4-minute response time (A). Redevelopment within the Project Area would have similar demands as the existing development. Consequently, it would not require the development of new fire protection facilities and would not result in any significant environmental effects associated with the provision of fire protection service.

Development facilitated under the CMH Code would be required to conform to the most recently adopted CBC and UBC requirements in addition to the California Fire Code (CFC). Fire safety features such as sprinklers would be provided in accordance with these codes. Additionally, as a condition of approval of individual developments, applicants would be required to contribute a per-unit Fire Department Impact Fee to the City, the specific amount of which would be determined prior to project approval. Impacts related to fire protection would be **less than significant** and further study in an EIR is not warranted.

- 1^b. The City of Ventura Police Department (PD) provides law enforcement and police protection within the City of Ventura. The City is divided into four geographic areas (Beats), which are based on the number of calls for service within the City. Currently the PD employs 134 officers (G) and has a staffing ratio of 1.24 officers per 1,000 residences. The VPD maintains a countywide mutual aid agreement with all law enforcement agencies within Ventura County.

The Project Area is located within Beat 2, which encompasses the beach, the marina, and the western portions of downtown and midtown. Beat 2 had 18,543 calls for service in 2007 (G). The closest police station is located approximately 4.7 miles from the project site at 1425 Dowell Drive. The PD response time objectives for priority one calls (e.g. – “in progress,” or injury traffic collisions) is approximately 5 minutes or less, while non-emergency service response times average 15-20 minutes (G).

Development under the CMH Code could increase the amount of calls for police service. The incremental increase in residents would incrementally reduce the existing ratio of police officers to residents, but would not create the need for new PD facilities. Therefore, it would not cause physical environmental effects associated with police protection services and the effect on police protection would be **less than significant**. Further study in an EIR is not warranted.

- 1^{c,d}. The CMH Code could facilitate the development of a limited number of residences, which would incrementally generate increased demand for school and park facilities in

the Project Area vicinity. Residents within the Project Area would attend schools as determined by the Ventura Unified School District (VUSD) based on the capacity of nearby public schools. Under the base scenario, students within the Hospital District would attend Loma Vista Elementary School, Cabrillo Middle School, and Ventura High School (A). Individual developers would be required to pay standard school impact fees to mitigate impacts to schools in the City. Pursuant to Section 65995(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Therefore, pursuant to CGC §65994(h), impacts relating to school capacity would not be significant if future developers within the VUSD continue to pay State-mandated school impact fees.

Public parks in the Hospital District vicinity include Ventura State Beach Park, Blanche Reynolds Park, Camino Real Park, and Arroyo Verde Park. Moreover, the CMH Code directs development of three open space areas (see Figure 4), that would serve the Project Area employees and residents. Impacts to schools and parks would be **less than significant** and further analysis in an EIR is not warranted.

- 1^e. The proposed CMH Code includes the development of internal roadways that would be wider than existing roadways and would incorporate increased trees and sidewalks. Roadways in the City, including existing roadways within the Project Area as well as roadways surrounding the Project Area, are maintained by the City. Proposed roadways would incrementally increase demand on City maintained facilities within the Project Area vicinity. However, this increase would not require a substantial increase of physical improvements that would cause adverse physical environmental impacts. Impacts related to public facilities would be **less than significant** and analysis of this issue in an EIR is not warranted.
- 2-3. The proposed CMH Code has the potential to accommodate additional residents who would utilize existing recreational facilities in the City (see above discussion under c,d). However, the additional residents are not likely to increase the use of parks such that substantial physical deterioration of facilities would occur or be accelerated. Moreover, the CMH Code directs development of three open space areas (see Figure 4), that would serve the Project Area employees and residents. The Project6 Area does not currently contain recreational facilities that would be eliminated. Therefore, the project would have a **less than significant** impact with respect to recreational facilities. Further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Implementation of the CMH Code would have a less than significant impact with regard to Public Services / Recreation. Therefore, no mitigation measures are required.

N. Transportation/Traffic:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Exceed, either individually or cumulatively, a level of service standard established by the county congestions management agency for designated roads or highways?	X			
2. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?	X			
3. Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	X			
4. Result in inadequate emergency access?	X			
5. Result in inadequate parking capacity?	X			
6. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	X			

Impact Discussion:

1,2,5. Development facilitated by the proposed CMH Code has the potential to increase traffic in the Project Area due to increased commercial, office, and residential uses. The 2005 General Plan indicated that future levels of service would remain acceptable with planned improvements. Nevertheless, a traffic model run will be conducted and the impacts related to level of service standards would be **potentially significant** pending further analysis in an EIR.

3,4. Development facilitated by the proposed CMH Code would rearrange the street network within the Project Area, altering the existing design features of the Project Area, including emergency access. It is anticipated that the new street extensions and configurations for hospital access would improve circulation. Nevertheless,

impacts would be **potentially significant** pending further analysis in an EIR.

6. The 2005 City of Ventura General Plan Circulation Element includes goals and policies to encourage the use of alternative transportation in the City. The proposed CMH Code includes a Mobility Plan that aims to increase the use of alternative modes of transportation, facilitate pedestrians and bicycles, and incentivize reduced vehicle congestion on the Project Area. In addition, the Project Area would have centralized parking. Nevertheless, the issue is **potentially significant**, pending further investigation in an EIR.

Mitigation/Residual Impact(s): Given the above, CMH Code implementation would result in potentially significant impacts that will be further analyzed in an EIR.

O. Utilities and Service Systems:

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
3. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
4. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	X			

Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impacts
5. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
6. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
7. Comply with federal, state, and local statutes and regulations related to solid waste?				X

Impact Discussion:

1,2,5. Local wastewater and water services are provided by the City of Ventura. The Ventura Water Reclamation Facility (WRF) is a permitted tertiary treatment plant with a 14 Million Gallon per Day (MGD) capacity, located at 1400 Spinnaker Drive, in the Ventura Harbor area near the mouth of the Santa Clara River. Wastewater flows from all areas of the City, including the Project Area, would be directed to this facility. A minimum of 5.6 MGD of the effluent is discharged to the Santa Clara Estuary as required by the existing NPDES Permit. The remaining effluent is either transferred to recycling ponds, where a portion is delivered as reclaimed water, or lost through percolation or evaporation. Methods for treatment of residual solids include thickening, anaerobic digestion and dewatering by filter presses.

Currently, the Ventura WRF receives an average of about 10 MGD (H). With a designed capacity of 14 MGD, this leaves 4 MGD of available capacity. Wastewater generation associated with Project Area development would be well within this available capacity. Therefore, impacts to the WRF would be **less than significant** and further analysis in an EIR is not warranted.

Generation rates for wastewater generation are 0.039 cfs/ 100 beds for the hospital and 0.0061 cfs/acre for commercial. Therefore, based on a net increase of 10 beds, and about five acres of commercial development (3,900 sf of retail and 221,444 sf of medical office), the proposed project would increase demand by about 0.03624 cfs. Utilizing a conversion factor of 646316.883 gallons per day is equivalent to 1 cfs, the Project would increase demand by 23,422.52 gallons per day.

The City is in the process of creating a Master Plan for wastewater infrastructure. The preliminary studies indicate there may be deficiencies downstream of the CMH District. The City has identified three locations where CMH is performing flow monitoring over a period of 14 days to get an accurate representation of the existing condition. These locations are 1) at the juncture of Telegraph Road and Main Street, 2) at the extension of Emma at Main Street, and 3) at the manhole south of the railroad tracks at Channel and Lemon Grove. Upon completion of flow monitoring by CMH, the flow monitoring results will be input to the City's model for the Wastewater Master Plan. The modeling could indicate that there are no capacity issues, or the modeling may identify an existing or future deficiency that the project would exacerbate. Depending on the results of the modeling, CMH may be required to fund improvements or fair share improvements related to increasing downstream capacity that would need to be implemented and ready to use prior to occupancy.

Environmental impacts associated with upgrading this infrastructure could include temporary traffic diversion during construction, air quality impacts from excavation activities, and impacts to cultural resources. As discussed in the EIR, there are no significance thresholds for temporary air quality impacts; therefore, no significant impacts related to air quality would be anticipated. As discussed earlier under the Cultural Resources Section of this initial Study, highly disturbed areas such as those within the Project Area and those associated with utility lines are unlikely to contain significant archaeological resources. Nevertheless, in the unlikely event that such resources are unearthed during excavation and grading, adherence to applicable regulatory requirements, including state laws pertaining to the handling and treatment of such resources would ensure that impacts would be less than significant. With respect to temporary traffic impacts, the City's standard procedures for construction timing and traffic diversion would result in a less than significant impact related to replacement of wastewater distribution infrastructure. Therefore, if a deficiency is identified, payment of fair share fees to fund capacity increases would result in a **less than significant** impact related to wastewater infrastructure capacity and further analysis in an EIR is not warranted.

It should be noted that the City requires each proposed development to provide an analysis of the existing wastewater system downstream of the proposed point of connection. A field flow study is required and the engineers for CMH are preparing a report now, summarizing findings of the field flow study. The analysis should include existing pipeline and lift station capacity. Depending on their findings, CMH will pay to the City the costs incurred to have the City's Wastewater consultants enter flow data into the City sewer model and make a determination of required improvements for the proposed development. Any deficiencies or improvements needed for the existing system are the responsibility of the new development.

Verification of existing laterals is required. CMH and associated developers will be required to identify locations and condition of existing laterals. Existing laterals shall be abandoned and repaired or replaced as necessary. Flow Monitoring will be required in various locations in order to identify/confirm required improvements to the City sewer system identified in the Draft Wastewater Master Plan in order to serve the

proposed project. Developer to work with the City's wastewater Manager to determine the various locations required being included in the flow monitoring study. The study should include flow monitoring of a fourteen-day period (wet period if possible).

Additional wastewater design requirements are contained in the current City's Engineering Design Standards and the City's Standard Construction Details for detailed and additional wastewater design requirements. Current information is available from Public Works.

3. Currently, stormwater runoff from the Project Area is accommodated by the City storm drain system, consisting of a series of catch basins and reinforced concrete pipes (RCP). The project area system feeds into a 36-inch RCP beneath North Brent Street. This pipeline connects with storm drain systems on Telegraph, Thompson, and Main Street. The system carries storm water southeast in a 68 inch RCP, south down Mills Road in the Mills Road Drain (a jurisdictional redline channel), and into Arundell Barranca (a jurisdictional redline channel)(P). The Watershed Protection District has permitting authority for work in, on, over, under, and across these facilities. District facilities are shown on a map in Attachment A to this report.

Development facilitated under the CMH Code does not include any modifications to District facilities and would replace existing above ground impervious development with new above ground impervious development. Development under the CMH Code would not increase the amount of impervious surfacing on the Project Area and will reduce the impervious area slightly through the construction of new open space areas. This will reduce the impervious surface from 85% under the existing condition to 78% under the improved condition (Jensen Design and Survey, Inc. November 2009). Development under the CMH Code would not involve work in, on, over, under or across District facilities.

Grading associated with redevelopment will modify the existing watershed areas and drainage patterns within the Project Area. Some upgrades and improvements will be necessary to ensure that facilities are sized appropriately to capture runoff from the modified watershed areas. The impact is **potentially significant unless mitigated**. This issue will be further discussed in EIR Section 4.6, *Hydrology and Water Quality*.

The Project Area will develop in accordance with City, County Watershed Protection District, and Regional Water Quality Control Board (RWQCB) policies. There will be no increase in runoff due to Project Area development under the CMH Code. Planned improvements in the Project Area include an infiltration system, open space, and a stormwater treatment system. The infiltration system includes bio-filters that would clean stormwater runoff prior to discharge into the storm drain system, permeable paving, and French drain techniques that would aid in capturing pollutants. New open space areas would be located at three locations in the Project Area. These open space areas would absorb stormwater runoff and decrease the amount of stormwater runoff that would enter the storm drain system.

Development within the Project Area would be required to comply with regulations contained in the NPDES permit and would be required to obtain a Stormwater Pollution Prevention Plan (SWPPP). The City, County, Watershed Protection District, and nine other local cities are co-permittees on the NPDES Permit (No. CAS004002) that was issued by the Regional Water Quality Control Board in 2000. NPDES is a Federal Environmental Protection Agency (EPA) program administered by states to control water pollution by regulating point source emissions. In California, the State Water Quality Control Board is responsible for ensuring compliance with the provisions of the Federal Clean Water Act and the State Water Quality Control Act. The Los Angeles RWQCB ensures local compliance with the countywide NPDES permit.

In order to comply with the NPDES permit, development within the Project Area would be required to utilize Best Management Practices (BMPs), which include incorporating stormwater retention, catch basin inserts, bioretention filtration, permeable pavers, and grass swales. The two primary permit objectives are to:

- Effectively prohibit non-storm water discharges; and
- Reduce the discharge of pollutants from storm water conveyance systems to the maximum extent practicable.

Implementation of the SWPPP (an erosion control plan required for construction activities) and compliance with applicable City requirements for control of storm runoff would prevent stormwater impacts to the surrounding environment. Additional discussion regarding compliance with NPDES requirements is contained in EIR Section 4.6, Hydrology and Water Quality.

4. Currently, the City provides drinking water to over 105,000 residents through approximately 31,000 water service connections. The City obtains its water from three sources: the Ventura River, Lake Casitas, and local groundwater wells. The City of Ventura owns and operates 11 wells, three water treatment plants (North Ventura Avenue Treatment Plant, Bailey Conditioning Facility, and the Saticoy Conditioning Facility), 23 booster pump stations, 31 water storage reservoirs and more than 500 miles of distribution pipelines. A portion of Ventura's water is pumped from four shallow wells that store Ventura River water. Water obtained from Lake Casitas is treated by the Casitas Municipal Water District (CMWD). Additional water is pumped from groundwater wells located in the eastern portion of the City. The City typically uses river surface water supplies prior to using groundwater supplies.

According to the City's Biennial Water Supply Report (I), projected citywide water demand in 2018 is 22,969 acre-feet per year (AFY) and overall City water supplies are 29,900 AFY. Project implementation could affect the City's water supplies by increasing the population on the Project site. Impacts to water supply are **potentially significant** and will be analyzed further in an EIR.

6. Development facilitated by the CMH Code would intensify an already built environment. It would result in new retail, office, and residential uses, including

construction of a new hospital building to house the existing use. Improvements to the hospital facility would increase the current hospital capacity by ten beds. Therefore, the increase of solid waste from the hospital facility would be incremental and would not represent a substantial increase. Additionally, retail, office, and residential uses developed in the Project Area would generate an increase in solid waste compared to existing uses. However, the increase in solid waste would not represent a substantial increase.

Solid waste generated within the Project Area would be taken to either the Toland Road Landfill or the Simi Valley Landfill. The Toland Road landfill has a maximum daily permitted capacity of 1,500 tons per day and receives 1,300 tons per day on average (J). The Simi Valley Landfill has a maximum permitted capacity of 3,000 tons per day. Project-generated solid waste would represent a small fraction of the available capacity (200 tons per day) at the Toland Road Landfill and all Project Area development would be required to participate in City waste diversion programs, which currently divert about 61% of solid waste generated in the City from area landfills. Impacts to solid waste disposal would therefore be **less than significant** and further analysis of this issue in an EIR is not warranted.

7. In 1991, the City adopted a Source Reduction & Recycling Element (SRRE) in response to the California Integrated Waste Management Act. Waste reduction programs from the SRRE that are being implemented include recycling programs, re-use programs, and regional materials recovery.

Solid waste disposal in Ventura County can be disposed at any landfill depending upon the preference of individual solid waste haulers and other factors, such as proximity to the collection area, tipping fees, and daily capacities at the landfill sites. Currently, most solid waste collected within Ventura County by public and private haulers is disposed of in the County. New development projects in the City are required to implement site specific source reduction, recycling, and re-use programs to comply with AB 939. Solid waste services during construction would be provided by E.J. Harrison and Sons, Inc. E.J. Harrison and Sons, Inc. would also provide residential solid waste collection service to the residents on the Project Area, including collection of solid waste, recyclables, and green waste. Development facilitated by the proposed CMH Code would be subject to AB 939 and all other solid waste regulations. **No impact** would occur and further analysis in an EIR is not warranted.

Mitigation/Residual Impact(s): Based on the above discussion, CMH Code implementation would result in potentially significant impacts that will be further analyzed in an EIR.

P. Mandatory Findings of Significance:

	Potentially Significant Impact	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	X			
3. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	X			

Findings Discussion:

1. Based on the information obtained in the preparation of this Initial Study, CMH Code implementation would not 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 significantly affect important pre-historical (archaeological) resources. However, the project does have the potential to affect historical resources. Therefore, because there is potential to adversely affect historical resources, this issue is considered **potentially**

significant, pending further investigation in an EIR.

2. As noted in the 2005 General Plan FEIR, projected citywide population growth would exceed SCAG's 2025 population forecasts for the City. Although this discrepancy is largely because SCAG has not updated its population forecasts to reflect the 2005 General Plan, exceedance of the population forecast, upon which AQMP air quality forecasts are based, was identified as an unavoidably significant air quality impact in the 2005 General Plan Final FEIR. In addition, the 2005 General Plan FEIR acknowledged that regional development may generate solid waste exceeding the capacity of area landfills over the life of the 2005 General Plan. The City Council adopted a Statement of Overriding Considerations for these impacts in conjunction with approval of the 2005 General Plan. Therefore, because this project's contribution to these impacts is part of the future buildout of the City and because a statement of overriding considerations was adopted for those impacts, this project would not by itself have cumulatively considerable population or solid waste disposal impacts.

The project would likewise not have significant or cumulatively considerable impacts related to agricultural resources, biological resources, archaeological/paleontological resources, hazards and hazardous materials and mineral resources because there are no resources/hazards on site to consider. These cumulative impacts would be **less than significant**.

In addition, the project would not have significant or cumulatively considerable impacts related to geology and soils, or public services and recreation because there are existing city policies/programs/ or procedures that already require the project to comply with regulations that reduce impacts to a level that is **less than significant**.

Section 3.0 of the EIR lists development projections under the 2005 General Plan. In total, there are about 8,000 residential units and five million square feet of non-residential development. This development would occur over time, similar to redevelopment of the Project Area. The project would not have significant or cumulatively considerable land use and planning impacts because the project has been designed in consideration of these guidance documents. The project would not have significant utilities and service system impacts because the project is located in an already developed urbanized area with adequate capacity and supplies to serve the needs. Cumulative impacts related to land use and utilities/service systems are **less than significant**.

Cumulative impacts related to air quality including greenhouse gas emissions and global climate change in addition to aesthetics, noise, transportation/traffic, hydrology and water quality, and historical resources are considered **potentially significant** and will be addressed within the respective sections of the EIR.

3. Development Code implementation could result in air quality or noise impacts that could have adverse effects on humans. This is considered a **potentially significant** impact.

VI. CIRCULATE TO THE FOLLOWING AGENCIES/PERSONS:

VENTURA COUNTY

Agricultural Commissioner (Rita Graham)	<input type="checkbox"/>	Ventura County Clerk/Recorder* (hand deliver – 1 original, 4 copies)	<input checked="" type="checkbox"/>
Ventura County Watershed Protection District*	<input checked="" type="checkbox"/>	Local Agency Formation Commission (LAFCO)	<input type="checkbox"/>
County of Ventura Resource Management Agency, Attn: Planning* Director (1 hard copy, 6 CDs)	<input checked="" type="checkbox"/>	Ventura County Transportation Commission* (VCTC)	<input checked="" type="checkbox"/>

ADJACENT COUNTIES

Kern County Planning & Development Services	<input type="checkbox"/>	County of Santa Barbara Planning Division	<input type="checkbox"/>
County of Los Angeles Dept. of Regional Planning Impact Analysis Section	<input type="checkbox"/>		

ADJACENT CITIES

City of Oxnard	<input checked="" type="checkbox"/>	City of Ojai	<input checked="" type="checkbox"/>
City of Santa Paula	<input checked="" type="checkbox"/>		

OTHER PUBLIC AGENCIES

Air Pollution Control District*	<input checked="" type="checkbox"/>	Ventura County Organization of Government (VCOG)	<input type="checkbox"/>
Ventura County Solid Waste Management Department	<input checked="" type="checkbox"/>	Ventura Regional Sanitation District*	<input checked="" type="checkbox"/>
Casitas Mutual Water District	<input checked="" type="checkbox"/>	South Coast Area Transit (SCAT)	<input checked="" type="checkbox"/>
Ventura Unified School District	<input checked="" type="checkbox"/>		

LIBRARIES

Avenue Branch Library*	<input checked="" type="checkbox"/>	H.P. Wright Branch Library*	<input checked="" type="checkbox"/>
------------------------	-------------------------------------	-----------------------------	-------------------------------------

E.P. Foster Branch Library* [X]

STATE AGENCIES

California Coastal Commission South Central Coast Area Office	[]	Southern California Association of Governments (SCAG)* (3 copies)	[X]
California Dept. of Fish & Game (Santa Barbara)	[]	Caltrans District 7 Environmental Section	[]
California Regional Water Quality Control Board	[]	State Department of Parks and Recreation	[]
California Integrated Waste Management Board, Permits Section	[]	Dept. of Boating & Waterways	[]
California Department of Toxic Substances Control	[]	State Clearinghouse (15 copies)	[X]

FEDERAL AGENCIES

U.S. Army Corps of Engineers	[]	U.S. Fish & Wildlife Service	[]
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CITIZEN GROUPS

Audubon Society	[]	Sierra Club	[]
Building Industry Association Greater Los Angeles/Ventura Region of Southern California, Inc.	[]	California Trout	[]
		Surfrider Foundation	[]
Environmental Coalition	[]	Friends of the Ventura River	[]
Environmental Defense Center	[]	League of Women Voters	[]
Friends of the Santa Clara River	[]	Santa Ynez Band of Mission Indians	[]
Ventureano Canaliano Chumash	[]	Owl Clan Consultants	[]
Candelaria American Indian Council	[]	Montalvo Property Owners Association	[]
Ventura County Archaeological Society	[X]	Foothill Road Homeowners Association	[X]
Westside Community Council	[]	East Ventura Community Council	[]
Downtown Community Council	[X]	Midtown Community Council	[X]

*Indicates agency/person always receives notice.

VII. LIST OF REFERENCES:

These references, and those previously cited within the text of this Initial Study/Environmental Assessment, are intended to provide a list of Supporting Information Sources and/or evidence staff has relied upon in completing this document and in reaching the conclusions contained herein. In addition, the materials that were submitted by the applicant have been used in completing this document.

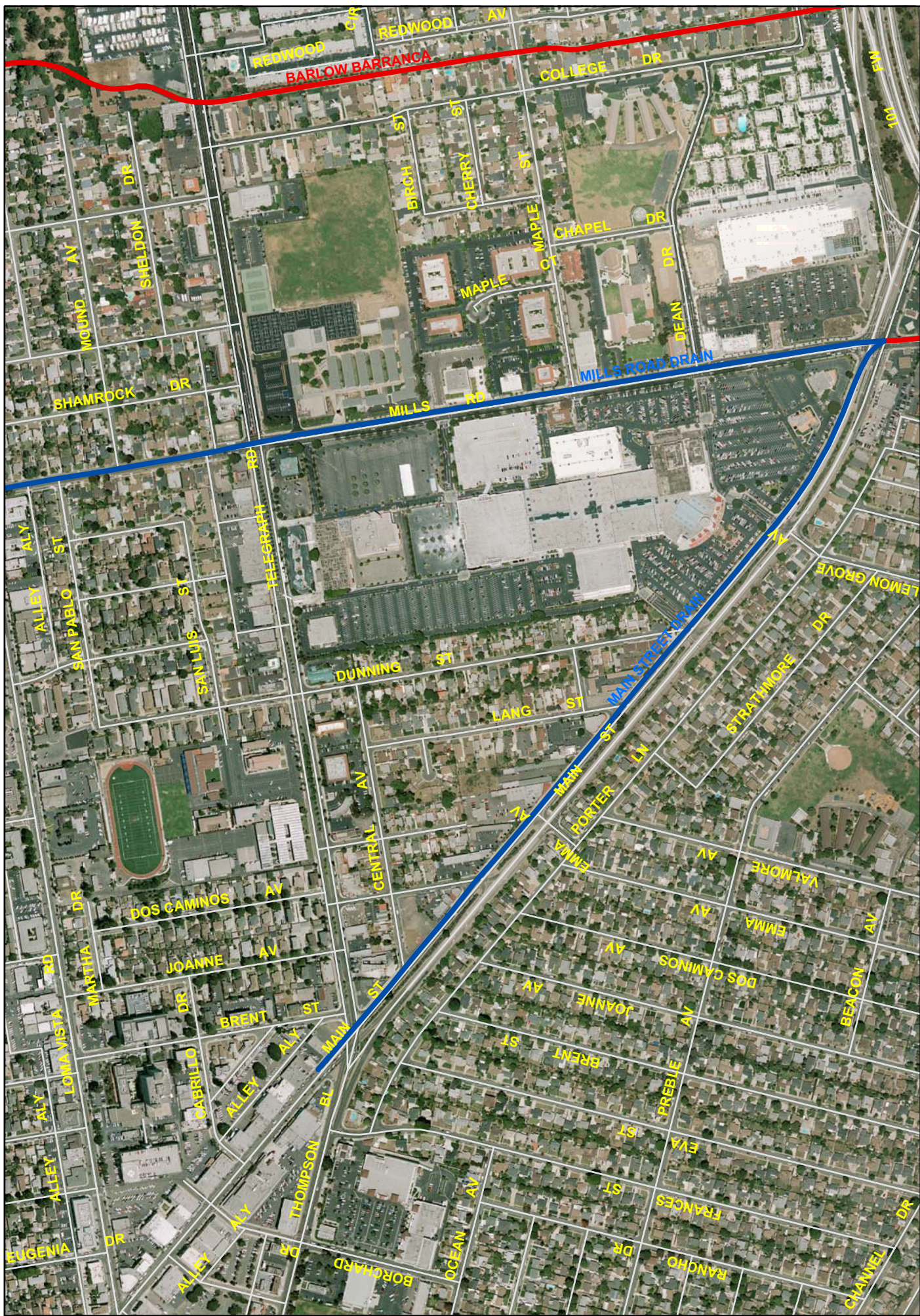
If any person or entity reviewing this Initial Study/Environmental Assessment has a question regarding the supporting information source and/or evidence, they may contact the staff planner at the address and telephone number noted on the front page of this document during the public review period.

- A. General Plan, including all technical appendices, maps, and the Final Environmental Impact Report prepared and certified therefore - City of San Buenaventura, 2005.
- B. Site Visit, Rincon Consultants, Inc. August, 2009.
- C. Zoning Ordinance, including all maps and the Negative Declaration (EIR-2010) prepared and adopted therefore - City of San Buenaventura, 1992.
- D. Caltrans. California Scenic Highway Program, Scenic Highway System, Eligible and Officially Designated Routes. Available online at <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>
- E. Web Soil Survey, U.S. Department of Agriculture, 2009.
- F. Chiara, Joseph. Urban Planning and Design Criteria.
- G. Karen Heath, Crime Analysis, 2008
- H. Don Burt, 2008
- I. City of Ventura, 2008. Biennial Water Supply Report.
- J. Sally Coleman, 2008.
- K. Community Memorial Hospital District Development Code, Draft, July 2009.
- L. Envirostor database, Department of Substance Control, 2009.

- M. Geotracker database, U.S. Environmental Protection Agency, 2009.
- N. Enviromapper database, U.S. Environmental Protection Agency, 2009.
- O. Community Memorial Hospital District Master Plan, 2009
- P. Master Drainage Plan, City of Ventura.
- Q. Flood Insurance Rate Map, FEMA
- R. Construction Noise. U.S. Environmental Protection Agency, 1971.
- S. City of Ventura Fire Department, 2008
- T. E-5 Population and Housing Estimates for Cities, Counties, and the State. California Department of Finance, 2009.
- U. Integrated Growth Forecast, Southern California Association of Governments, 2009.
- V. Community Memorial Hospital District Master Plan, Internal Review Draft, January 2009.

VIII. PERSONS AND/OR AGENCIES CONSULTED DURING PREPARATION OF THIS INITIAL STUDY/ENVIRONMENTAL ASSESSMENT:

<u>Person</u>	<u>City Agency</u>	<u>Comments</u>
Chandra Chandrashaker	Land Development	Transportation
Gene Hibberd	Public Works	Stormwater
Andrew Stuffer	Inspection Services	Building/Fire Safety
Brian Clark	Fire Department	Fire Safety
Joe Santos	Public Works	Sewer
Susan Rungren	Public Works	Water
Ralph Deex	Public Works	Parks
Chris Dejarme	Land Development	Stormwater
Kevin Rennie	Ventura City Fire Dept.	Fire Service
Susan Rungren	Wastewater	Wastewater
Karen Heath	Ventura City Police Dept.	Crime Analysis



1 inch = 600 feet

Watershed Protection District Jurisdiction Facilities

Prepared by: Jensen Design & Survey Inc.
Parcel boundaries on this exhibit are a graphical representation only. They should not be used in place of record boundary information and/or field survey data and do not accurately define property boundaries.



Notice of Preparation

To: Interested Parties

**From: City of San Buenaventura
Community Development Department
501 Poli Street
P.O. Box 99
Ventura, CA 93002-0099**

Subject: Notice of Preparation of a Draft Environmental Impact Report Community Memorial Hospital District Development Code

The City of San Buenaventura (Ventura) will be the Lead Agency for the preparation of a draft environmental impact report (EIR) for the proposed Community Memorial Hospital District Development Code (CMH Code). The CMH Code is intended to function as a policy document to guide future improvements to the existing hospital and surrounding area. The project area encompasses 15 acres located in the Midtown portion of the City and is bounded by Main Street to the west, Loma Vista Road to the north, and Brent Street to the east. The overall objectives of the CMH Code are to:

- *Facilitate construction of a new hospital building that is compatible in the Midtown context*
- *Develop a building to house the CMH operations that is compliant with the most current seismic and health safety regulations*
- *Create a hospital campus that takes advantage of opportunities for improving parking management*
- *Create an attractive public realm with convenient pedestrian flows*
- *Create new investment incentives for local private property owners*

The Draft EIR will examine the following issue areas on the City's environmental checklist:

- *Aesthetics*
- *Air Quality*
- *Historic Resources*
- *Noise*
- *Traffic/Parking*

The project description, location, and discussion of the project's potential environmental effects are contained in the attached Initial Study.

The City is seeking input on the scope of the environmental analysis for the proposed project. Please send your response to Kaizer Rangwala, Assistant Community Development Director, at the address shown above. Mr. Rangwala can be reached at (805) 677-3918. Please provide the name of a contact person in your agency when responding. Materials related to the Community Memorial Hospital District Development Code are available for review at the City of Ventura Community Development Department, Ventura City Hall, 501 Poli Street in Ventura. Background materials can also be viewed online at <http://www.ci.ventura.ca.us>.

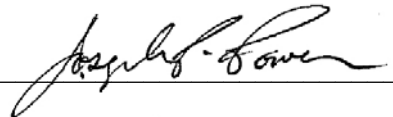
Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than October 20, 2009.

The City will hold an EIR scoping meeting on the Community Memorial Hospital District Development Code on Monday, October 12, 2009 in the Community Meeting Room at Ventura City Hall, 501 Poli Street. The meeting will begin at 5:30 PM. The purpose of this meeting is to solicit input on the scope and content of the environmental analysis that will be included in the Draft EIR.

Project Title: Community Memorial Hospital Master Plan

Project Applicant: Community Memorial Health System

Date 9/18/09

Signature 

Title Principal, Rincon Consultants
(consultant to City)

Telephone (805) 641-1000

DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS – M.S.#40

1120 N STREET

P. O. BOX 942874

SACRAMENTO, CA 94274-0001

PHONE (916) 654-4959

FAX (916) 653-9531

TTY 711

*Flex your power!
Be energy efficient!***RECEIVED****OCT 26 2009****PLANNING DIVISION**

October 13, 2009

Mr. Kaizer Rangwala
City of San Buenaventura
P.O. Box 99
Ventura, CA 93002-0099

Dear Mr. Rangwala:

The City of San Buenaventura's Notice of Preparation of a Draft Environmental Impact Report for the Community Memorial Hospital District Development Code; SCH# 2009091073

The California Department of Transportation (Caltrans), Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public-use and special-use airports and heliports.

The proposal is for the Community Memorial Hospital (CMH) District Development Code (CMH Code) which will guide redevelopment of a 15-acre area. Under the CMH Code, CMH proposes to construct a new building to house the existing hospital operations as required by the Housing Facilities Seismic Safety Act.

As shown in Figure 2 of the Notice of Preparation, the Community Memorial Hospital Heliport is currently located on the roof of a parking garage within the "project area." This heliport operates with a State heliport permit issued by the Division. If the heliport is to be relocated, a new State heliport permit will be required in accordance with State Public Utility Code (PUC) Section 21663. For information on the heliport permit process, please be advised to contact the Division's Aviation Safety Officer for Ventura County, Dan Gargas, at (916) 654-5222. Information regarding the State heliport permit process is also available on-line at <http://www.dot.ca.gov/hq/planning/aeronaut/heliportpermit.html>.

Additionally, we may require verification from Ventura County Airport Land Use Commission (ALUC) that they have considered the proposed heliport. A new heliport will require the filing of a Notice of Landing Area Proposal (Form 7480-1) with the Federal Aviation Administration (FAA). A copy of the form is available at <http://forms.faa.gov/forms/faa7480-1.pdf>.

The Division must be assured that the proposal is in full compliance with CEQA. To ensure that the community will not be adversely impacted by helicopter operations, flight paths should avoid noise-sensitive and people intensive uses. Consideration given to the issue of compatible land uses in the vicinity of a heliport should help to relieve future conflicts between the heliport and its neighbors.

Section 21659 of the PUC prohibits structural hazards near airports and heliports. Structures should not be at a height that will result in penetration of the approach imaginary surfaces of the heliport. The FAA

Mr. Kaizer Rangwala
October 13, 2009
Page 2

may also require the filing of a Notice of Proposed Construction or Alteration (Form 7460-1) for certain project-specific activities in accordance with Federal Aviation Regulations Part 77 "Objects Affecting Navigable Airspace." Form 7460-1 is available at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>.

These comments reflect the areas of concern to the Division of Aeronautics with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 7 office concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please call me at (916) 654-5314 or by email at sandy.hesnard@dot.ca.gov.

Sincerely,



SANDY HESNARD
Aviation Environmental Specialist

c: State Clearinghouse, Ventura County ALUC



VENTURA COUNTY
WATERSHED PROTECTION DISTRICT
PLANNING AND REGULATORY DIVISION
800 South Victoria Avenue, Ventura, California 93009
Robin Jester – Permit Manager – (805) 654-3986

DATE: October 16, 2009

TO: Laura Hocking – Case Planner

FROM: Robin Jester

SUBJECT: RMA 09-047, NOTICE OF PREPARATION OF A DRAFT
ENVIRONMENTAL IMPACT REPORT FOR COMMUNITY MEMORIAL
HOSPITAL DISTRICT DEVELOPMENT CODE – CEQA INITIAL STUDY,
MILLS ROAD DRAIN AND ARUNDELL BARRANCA, ZONE 2

This is a Notice of Preparation of a Draft Environmental Impact Report for the proposed Community Memorial Hospital District Development Code (CMH Code). The CMH Code is intended to function as a policy document to guide future improvements to the existing hospital and surrounding areas. The project area encompasses 15 acres located in the Midtown portion of the City and is bounded by Main Street to the west, Loma Vista Road to the north, and Brent Street to the east. The project description, location, and discussion of the project's potential environmental effects are contained in the Initial Study. The redevelopment of the project area also results in zoning changes within the project boundary.

The Watershed Protection District (District) has reviewed the Initial Study for the above referenced project prepared by the City of San Buenaventura with the assistance of Rincon Consultants, Inc. that is dated September 2009. The District has reviewed the project area location map, figures showing the existing and proposed project are zoning, project description and project scope of the proposed improvements, and the evaluation of the environmental impacts. The District has particularly reviewed those areas within our purview including Section H: Hydrology and Water Quality and Section O: Utilities and Service Systems. The Initial Study does identify the storm drain system in the vicinity of the project site and identifies the path to a major channel, Arundell Barranca. The EIR should note, while describing the local storm drain system, that the system that travels south down Mills Road is Mills Road Drain, a jurisdictional redline channel. In addition, Arundell Barranca should also be identified as a District jurisdictional redline channel, with the District having permitting authority for work in, on, over, under, and across these facilities. Mills Road Drain south of Main Street and Arundell Barranca are also encumbered by easement to the District. The Initial Study (IS) in Section H, Item 3, does not directly state there will be no increase in the rate or amount of surface runoff from the Project Area, rather the IS states no increase "is anticipated." In Section O, Item 3, the IS again does not directly address if construction of new stormwater drainage facilities or expansion of existing facilities is required. Rather, the IS states the project


area storm drain system would be designed and constructed to meet current City and RWQCB standards.

The EIR must acknowledge and clearly show and label the District's facilities and provide detailed information relative to any improvements with a direct impact on our facilities. The EIR should also address any other development occurring within the same time frame adjacent to the described drainage path to Arundell Barranca to determine cumulative impacts. Since construction is being proposed within the Project Area over a period of years, sufficient information must be provided to discuss drainage patterns and infrastructure such as storm drains for the District to ascertain any impacts on our facilities. Discussion items must include all plans for upgrading existing facilities, either internal to the site or to District facilities. The District will be evaluating impacts to our channels. The document must also note that the District has permitting authority for any work in, on, over, under, and across the above named facilities.

End of Text

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Laura Hocking/Dawnyelle Addison, Planning DATE: October 15, 2009

FROM: Alicia Stratton 

SUBJECT: Request for Review of Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the Community Memorial Hospital District Development Code, City of Ventura (Reference No. 09-047)

Air Pollution Control District staff has reviewed the subject project, which is a request for development of the Community Memorial Hospital District Development Code. The Code is intended to function as a policy document to guide future improvements to the existing hospital and surrounding area. The project area encompasses 15 acres located in the Midtown portion of the City of Ventura and is bounded by Main Street to the west, Loma Vista Road to the north, and Brent Street to the east.

The overall objectives of the Code are to: facilitate construction of a new hospital building that is compatible in the Midtown context; develop a building to house the CMH operations that is compliant with the most current seismic and health safety regulations; create a hospital campus that takes advantage of opportunities for improving parking management; create an attractive public realm with convenient pedestrian flows and create new investment incentives for local private property owners. The project involves demolition of the existing structure, and construction of a new hospital building.

District staff recommends that the air quality section of the draft environmental impact report be prepared in accordance with the 2003 *Ventura County Air Quality Assessment Guidelines* (2003 Guidelines). Specifically, the air quality assessment should consider reactive organic compound, nitrogen oxide emissions and particulate matter from all project-related motor vehicles and construction equipment. Additionally, the air quality assessment should consider potential impacts from fugitive dust, including PM10, that would be generated by future site preparation and construction activities. Because building demolition is proposed, any potential exposure to asbestos should be addressed as well. Project consistency with the Ventura County Air Quality Management Plan should be included.

Moreover, because the surrounding area contains a large number of sensitive receptors, we recommend that a screening health risk assessment be performed for possible exposure to diesel exhaust and particulate matter from earthmoving and excavation

equipment and other project-related construction activities. Mitigation measures should also be identified and discussed if the assessment indicates a significant risk.

Additional information on TACs can be obtained from the District's website at http://www.vcapcd.org/air_toxics.htm. If you have any general questions regarding air toxics, please contact Terri Thomas of the APCD at (805) 645-1405 or by email at terri@vcapcd.org.

If project-related air quality impacts are deemed significant, appropriate mitigation measures should be identified and included in the environmental impact report.

If you have any questions, please call me at (805) 645-1426.

Sign-in Sheet

Please sign your name below:

Name

Street/Email Address

Steve Basso

genevievebasso@att.net
41 N. JOANNE VTA 93003

Robert B. D'Angelo
Carolyn D'Angelo

4239 Skywalker Dr
Somis, Ca 93066

BOB GLETZEN

"YOLANDA"
1353 DONOVAN ST #21

Adam Thunell

147 N. BERT ST.

Gale Albright

galealbright@yahoo.com

Jim Price

Sicoquy@hotmail.com



Sign-in Sheet

Please sign your name below:

Name

Street/Email Address

HAADY LASHKARI
ASSISTANT VICE PRESIDENT

147 N. BRENT STREET
VENTURA, CA 93003



ADAMS BROADWELL JOSEPH & CARDOZO

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

801 GATEWAY BOULEVARD, SUITE 1000
SOUTH SAN FRANCISCO, CA 94080-7037

TEL: (650) 589-1860

FAX: (650) 589-5062

jlaurain@adamsbroadwell.com

SACRAMENTO OFFICE

520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4716

TEL: (916) 444-6201

FAX: (916) 444-6209

DANIEL L. CARDOZO
THOMAS A. ENSLOW
TANYA A. GULESSERIAN
MARC D. JOSEPH
ELIZABETH KLEBANER
RACHAEL E. KOSS
LOULENA A. MILES
ROBYN C. PURCHIA

OF COUNSEL
THOMAS R. ADAMS
ANN BROADWELL
GLORIA D. SMITH

January 5, 2010

VIA FACSIMILE AND U.S. MAIL

Mr. Jeff Lambert
Community Development Director
City of San Buenaventura
Community Development Department
P.O. Box 99
Ventura, CA 93002-0099
Fax: (805) 653-0763

Ms. Mabi Covarrubias Plisky, MMC
City Clerk
City of San Buenaventura
P.O. Box 99
Ventura, California 93002-0099
Fax: (805) 641-1046

Re: Request for Mailed Notice of CEQA Actions and Public
Hearings - Community Memorial Hospital District
Development Code

Dear Mr. Lambert and Ms. Plisky:

We are writing on behalf of Sheet Metal Workers, Local 273 to request mailed notice of the availability of the Draft Environmental Impact Report ("DEIR") for the Community Memorial Hospital District Development Code ("Project"), prepared pursuant to the California Environmental Quality Act. This request includes a copy of the DEIR and all related materials when they are made available for public review.

We also request mailed notice of any and all hearings and/or actions related to the Project. These requests are made pursuant to Public Resources Code section

2370-003a

January 5, 2010

Page 2

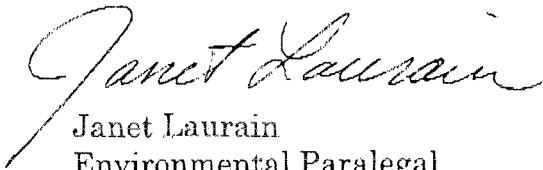
21092.2 and Government Code section 65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

Please send the above requested items to our South San Francisco Office as follows:

Janet Laurain
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Please call me at (650) 589-1660 if you have any questions. Thank you for your assistance with this matter.

Sincerely,


Janet Laurain
Environmental Paralegal

JML:bh

cc: Mr. Kaizer Rangwala
Assistant Community Development Director
Fax: (805) 653-0763

From: "San Buenaventura Conservancy" <sbconservancy@mac.com>
To: "Kaizer Rangwala" <krangwala@ci.ventura.ca.us>, "Jeffrey Lambert" <jlambert@ci.ventura.ca.us>, "City Clerk" <cityclerk@ci.ventura.ca.us>, "Ariel Calonne" <acalonne@ci.ventura.ca.us>
Sent: Tuesday, October 13, 2009 2:29:56 PM
Subject: Community Memorial Scoping meeting notice problem

Re: Community Memorial Hospital District Development Code Scoping Meeting.

SCH# 2009091073

This letter is a formal complaint regarding the inadequacy of notice for the Community Memorial Hospital Code scoping meeting held on October 12, 2009. Projects with regional impacts pursuant to CEQA section 15206 require CEQA scoping meetings before environmental documents are prepared, CEQA 15082. (c) (1) and notice of those meetings should be sent out regionally to all interested and effected parties.

A notice letter was sent to the San Buenaventura Conservancy post-marked Thursday 10-8-2009 for a meeting to be held on a Monday (Federal Holiday after a three day weekend) four days later. The Conservancy has a Post Office Box, that was not accessible because of the Monday holiday until Tuesday 10-13-2009 the day after the scoping meeting. Since we received notice the day after the meeting the Conservancy was excluded from the discussion and comment.

The Conservancy has comments on the scope of the EIR and would like to hear the comments of other interested parties in the scoping meeting.

We believe that the noticing for this meeting was completely inadequate and the meeting should be rescheduled (not on a federal holiday), re-noticed, and reconvened. This will allow the Conservancy to make and hear comments and inform our membership in case they have comments regarding the scoping of the EIR.

Thank you,

The San Buenaventura Board of Directors

San Buenaventura Conservancy <http://www.sbconservancy.org>

The Conservancy works to recognize, preserve and revitalize the irreplaceable historic, architectural and cultural resources of San Buenaventura and surrounding areas. We seek to increase public awareness of, and participation in, local preservation issues, and disseminate information useful in the preservation of the structures and neighborhoods of San Buenaventura.

To be removed from this list reply with remove in the subject line.

San Buenaventura Conservancy
PO Box 23263
Ventura Ca 93002
sbconservancy@mac.com

Appendix B

Parcel Details

Emergency Room Description



Project Area Parcel Details

Parcel Address	APN Number	Lot Size (Square Feet)	Midtown Corridor Regulating Plan Designation	Proposed Use Under Master Plan	New CMH Zoning Designation
CMH 147 N. Brent Street	077-0-011-250	182,516	None, zoned H	Existing Hospital Facility	SD:H1
145 N. Brent Street	077-0-011-330	20,880	None, zoned P-O	Proposed Hospital Facility	SD:H1
2841 Cabrillo Drive	077-0-011-400	13,680	None, zoned P-O	Proposed Hospital Facility	SD:H1
2825 Cabrillo Drive	077-0-011-410	6,840	None, zoned P-O	Proposed Hospital Facility	SD:H1
2793 Cabrillo Drive	077-0-011-150	6,840	None, Zoned P-O	Proposed Hospital Facility	SD:H1
2856 Cabrillo Drive	077-0-021-010	6,600	none, zoned P-O	Public Roadway	SD:H1
107 N. Brent Street	077-0-021-020	5,012	T.5-2 Urban Neighborhood Center	Public Roadway	SD:H1
95 N. Brent Street	077-0-021-030	5,060	T.5-2 Urban Neighborhood Center	Public Roadway	SD:H1
85 N. Brent Street	077-0-021-040	5,673	T.5-2 Urban Neighborhood Center	Hospital or Private Development	SD:H1
Glen Street Parking Lot	077-0-022-010	6,970	T.5-2 Urban Neighborhood Center	Open Space	OS
Glen Street Parking Lot	077-0-022-020	6,000	T.5-2 Urban Neighborhood Center	Open Space	OS
Glen Street Parking Lot	077-0-022-030	6,000	T.5-2 Urban Neighborhood Center	Open Space	OS
Glen Street Parking Lot	077-0-022-040	6,000	T.5-2 Urban Neighborhood Center	Public Roadway	SD:H1
Glen Street Parking Lot	077-0-022-050	6,000	T.5-2 Urban Neighborhood Center	Public Roadway	SD:H1
Glen Street Parking Lot	077-0-022-060	24,000	T.5-2 Urban Neighborhood Center	Proposed Parking Structure	SD:H1
Glen Street Parking Lot	077-0-022-070	5,820	T.5-2 Urban Neighborhood Center	Proposed Parking Structure and Hospital or Private Development	SD:H1

Project Area Parcel Details

Parcel Address	APN Number	Lot Size (Square Feet)	Midtown Corridor Regulating Plan Designation	Proposed Use Under Master Plan	New CMH Zoning Designation
25 North Brent Street 29 North Brent Street	077-0-022-080	6,600	T.5-2 Urban Neighborhood Center	Hospital or Private Development	None
2809 E. Main Street 2811 E. Main Street 2815 E. Main Street	077-0-022-130	10,500	T.5-2 Urban Neighborhood Center	Public Roadway	None
2781 E. Main Street 2785 E. Main Street 2787 E. Main Street 2789 E. Main Street 2795 E. Main Street	077-0-022-140	12,600	T.5-2 Urban Neighborhood Center	Private Commercial	None
2767 E. Main Street	077-0-022-150	8,400	T.5-2 Urban Neighborhood Center	Private Commercial	None
2753 E. Main Street	077-0-011-385	15,568	T.5-2 Urban Neighborhood Center	Private Commercial	None
2727 E. Main Street 2731 E. Main Street 2733 E. Main Street 2735 E. Main Street	077-0-011-375	14,336	T.5-2 Urban Neighborhood Center	Private Commercial	None
2723 E. Main Street	077-0-011-235	9,622	T.5-2 Urban Neighborhood Center	Private Commercial	None
2711 E. Main Street 2713 E. Main Street 2715 E. Main Street 2721 E. Main Street	077-0-011-240	15,978	T.5-2 Urban Neighborhood Center	Private Commercial	None
2709 E. Main Street	077-0-011-350	20,300	T.5-2 Urban Neighborhood Center	Private Commercial	None
2601 E. Main Street	077-0-011-010	33,100	T.5-2 Urban Neighborhood Center	Private Commercial	None
2686 Loma Vista Road	077-0-011-020	4,750	T.5-2 Urban Neighborhood Center	Private Commercial	None
2690 Loma Vista Road 2692 Loma Vista Road	077-0-011-030	4,750	T.5-2 Urban Neighborhood Center	Private Commercial	None

Project Area Parcel Details

Parcel Address	APN Number	Lot Size (Square Feet)	Midtown Corridor Regulating Plan Designation	Proposed Use Under Master Plan	New CMH Zoning Designation
2694 Loma Vista Road 2700 Loma Vista Road					
Loma Vista Parking (Surface and Garage)	077-0-011-360	112,285	T.5-2 Urban Neighborhood Center	Open Space and Commercial	OS and SD:H1
Virginia Drive Surface Parking Lot	007-0-011-290	12,196	T.5-2 Urban Neighborhood Center	Proposed Hospital Facility	SD:H1
Total		594,876 SF 13.7 Acres			

Source: Ventura County Assessor. <http://assessor.countyofventura.org/index.html>. Accessed March 2009.

City of Ventura Graphic Information System, March 19, 2009.

Emergency Department Capacity

The capacity of the emergency department is increased by the project, but true through-put capacity is constrained by a variety of factors, explained below, and as a result, the actual increase is a challenge to quantify. Undeniably the capacity is increased and it will support future increased patient visits if the demand presents.

During the study period, the average patient volume was about 110 patients per day. 43.8% of patients presented during 8am-4pm, 39.7% presented between 4pm-midnight, and 16% during the hours of midnight-8am. Lengths of stay tend to be bi-modal with simpler visits lasting about 3 hours, and more complicated cases (18-20% of cases) averaging 6.3 hours, and these cases almost always result in admission to the hospital. Admission to a hospital bed can be a constraint in the flow of the ED if the hospital is running at or near capacity and may cause a back up until an inpatient is discharged or additional staffing can be brought in. Other constraints of ED through-put include the turn-around times for laboratory and imaging services, the availability of physician specialists, family arrival and conferencing time, the need for family to spend time with the deceased, and the need to transfer the patient to a different type or level of care.

The new facility increases treatment spaces from 24 to 40. However, two important changes with patient flow will occur. A new “fast-track” subdivision comprised of 5 treatment spaces will be used to treat less acute needs. Thus 12.5% of the beds will be ear-marked for specific needs. The second planned change is that patients will be assigned to treatment spaces for the duration of their ED visit. This avoids the potential complication of a new patient arriving in the treatment space while the prior patient is being seen in the imaging department and then having to hold the first patient in the hall until the next ED bed opens up. Although the duration-of-stay assigned room reduces through-put potential, the change is expected to decrease waiting room time and increase patient satisfaction.

The other factor to consider is that demand is uneven and therefore capacity varies. The staffing requirements and other resources needed to care for 7 “typical” patients could be the same as the requirement to care for one heart attack victim, and 3 people involved in an auto accident. So while the number of treatment spaces is a clear proxy for capacity, true through-put capacity is defined by the combination of space, hospital and physician staff levels, and other services and staff needed to treat the variety of patient requirements as they present in time.

In planning for ED capacity, CMH seeks to balance current demand, area population and demographic projections, and prudent assumptions for a 20-30 year time horizon.

Intensive and Coronary Care Capacity

The existing hospital is currently licensed for 10 intensive care beds and 11 coronary care beds. The expanded hospital is seeking to create a combined intensive and coronary care unit that will have between 24 and 30 beds. Currently, the intensive and coronary care units must have specific nursing staffing for each unit. The combined intensive and coronary care unit will permit hospital staff to more

efficiently operate both care units and permit staffing to overlap between the intensive and coronary care beds.

Like the ER, patient demand for these care services is unpredictable, and the combined intensive and coronary unit is not expected to increase the demand for intensive or coronary care services but rather is expected to better serve existing demands by permitting a more efficient staffing operation.

Appendix C



*Air Quality: URBEMIS 2007 & Greenhouse Gas Assumptions
Ordinance 93-37*

Page: 1

8/2/2010 4:58:07 PM

Construction Phase I incl. demolition, 3,900 SF
Retail + 252 bed Hospital

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\clindbeckvaught\Application Data\Urbemis\Version9a\Projects\CMH 7.9.10.urb924

Project Name: CMH Phase I

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

8/2/2010 4:58:07 PM

Summary Report

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (lbs/day unmitigated)	8.96	53.46	48.47	3.55	51.01	10.13	3.27	12.47	6,648.15
2010 TOTALS (lbs/day mitigated)	8.96	53.46	21.10	1.53	21.92	4.40	1.40	5.15	6,648.15
2011 TOTALS (lbs/day unmitigated)	6.40	32.98	0.09	2.55	2.64	0.03	2.34	2.38	4,831.16
2011 TOTALS (lbs/day mitigated)	6.40	32.98	0.09	1.13	1.23	0.03	1.04	1.07	4,831.16
2012 TOTALS (lbs/day unmitigated)	12.67	31.08	0.09	2.36	2.45	0.03	2.17	2.20	4,831.31
2012 TOTALS (lbs/day mitigated)	6.74	31.08	0.09	1.06	1.15	0.03	0.97	1.00	4,831.31
2013 TOTALS (lbs/day unmitigated)	12.38	15.51	0.08	1.00	1.08	0.03	0.92	0.95	3,356.94
2013 TOTALS (lbs/day mitigated)	7.58	15.51	0.08	0.60	0.68	0.03	0.54	0.57	3,356.94
2014 TOTALS (lbs/day unmitigated)	9.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
2014 TOTALS (lbs/day mitigated)	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
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Page: 3

8/2/2010 4:58:07 PM

Time Slice 6/7/2010-7/30/2010 Active Days: 40	2.43	26.28	21.10	1.30	22.40	4.40	1.20	5.60	3,598.59
Demolition 06/06/2010- 07/30/2010	2.43	26.28	21.10	1.30	22.40	4.40	1.20	5.60	3,598.59
Fugitive Dust	0.00	0.00	21.00	0.00	21.00	4.37	0.00	4.37	0.00
Demo Off Road Diesel	1.14	7.68	0.00	0.59	0.59	0.00	0.54	0.54	700.30
Demo On Road Diesel	1.26	18.55	0.10	0.71	0.81	0.03	0.65	0.69	2,795.84
Demo Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Time Slice 8/2/2010-9/24/2010 Active Days: 40	3.76	35.72	48.46	1.66	50.12	10.13	1.53	11.66	3,960.17
Fine Grading 08/02/2010- 10/29/2010	3.76	35.72	48.46	1.66	50.12	10.13	1.53	11.66	3,960.17
Fine Grading Dust	0.00	0.00	48.40	0.00	48.40	10.11	0.00	10.11	0.00
Fine Grading Off Road Diesel	3.00	24.99	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.73	10.68	0.06	0.41	0.47	0.02	0.38	0.40	1,610.40
Fine Grading Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Time Slice 9/27/2010-10/29/2010 Active Days: 25	5.84	<u>53.46</u>	<u>48.47</u>	2.54	<u>51.01</u>	<u>10.13</u>	2.34	<u>12.47</u>	5,777.26
Fine Grading 08/02/2010- 10/29/2010	3.76	35.72	48.46	1.66	50.12	10.13	1.53	11.66	3,960.17
Fine Grading Dust	0.00	0.00	48.40	0.00	48.40	10.11	0.00	10.11	0.00
Fine Grading Off Road Diesel	3.00	24.99	0.00	1.25	1.25	0.00	1.15	1.15	2,247.32
Fine Grading On Road Diesel	0.73	10.68	0.06	0.41	0.47	0.02	0.38	0.40	1,610.40
Fine Grading Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Trenching 09/27/2010-11/27/2010	2.09	17.74	0.00	0.88	0.88	0.00	0.81	0.81	1,817.09
Trenching Off Road Diesel	2.06	17.69	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45

8/2/2010 4:58:07 PM

Time Slice 11/1/2010-11/26/2010	<u>8.96</u>	52.68	0.10	<u>3.55</u>	3.65	0.03	<u>3.27</u>	3.30	<u>6,648.15</u>
Active Days: 20									
Asphalt 11/01/2010-02/17/2012	2.72	16.12	0.01	1.39	1.40	0.00	1.28	1.28	1,485.44
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.64	15.97	0.00	1.39	1.39	0.00	1.27	1.27	1,272.04
Paving On Road Diesel	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.06	0.10	0.01	0.00	0.01	0.00	0.00	0.01	204.90
Building 11/01/2010-11/30/2013	4.16	18.81	0.08	1.28	1.36	0.03	1.18	1.21	3,345.63
Building Off Road Diesel	3.65	16.55	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	0.13	1.62	0.01	0.06	0.08	0.00	0.06	0.06	340.62
Building Worker Trips	0.38	0.65	0.07	0.03	0.09	0.02	0.02	0.05	1,383.81
Trenching 09/27/2010-11/27/2010	2.09	17.74	0.00	0.88	0.88	0.00	0.81	0.81	1,817.09
Trenching Off Road Diesel	2.06	17.69	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Time Slice 11/29/2010-12/31/2010	6.88	34.94	0.09	2.67	2.77	0.03	2.46	2.49	4,831.06
Active Days: 25									
Asphalt 11/01/2010-02/17/2012	2.72	16.12	0.01	1.39	1.40	0.00	1.28	1.28	1,485.44
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.64	15.97	0.00	1.39	1.39	0.00	1.27	1.27	1,272.04
Paving On Road Diesel	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.06	0.10	0.01	0.00	0.01	0.00	0.00	0.01	204.90
Building 11/01/2010-11/30/2013	4.16	18.81	0.08	1.28	1.36	0.03	1.18	1.21	3,345.63
Building Off Road Diesel	3.65	16.55	0.00	1.19	1.19	0.00	1.10	1.10	1,621.20
Building Vendor Trips	0.13	1.62	0.01	0.06	0.08	0.00	0.06	0.06	340.62
Building Worker Trips	0.38	0.65	0.07	0.03	0.09	0.02	0.02	0.05	1,383.81

8/2/2010 4:58:08 PM

Time Slice 1/3/2011-12/30/2011	<u>6.40</u>	<u>32.98</u>	<u>0.09</u>	<u>2.55</u>	<u>2.64</u>	<u>0.03</u>	<u>2.34</u>	<u>2.38</u>	<u>4,831.16</u>
Active Days: 260									
Asphalt 11/01/2010-02/17/2012	2.55	15.29	0.01	1.33	1.34	0.00	1.22	1.23	1,485.45
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.05	0.09	0.01	0.00	0.01	0.00	0.00	0.01	204.91
Building 11/01/2010-11/30/2013	3.85	17.69	0.08	1.22	1.30	0.03	1.12	1.15	3,345.72
Building Off Road Diesel	3.39	15.67	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.12	1.43	0.01	0.06	0.07	0.00	0.05	0.05	340.65
Building Worker Trips	0.34	0.59	0.07	0.03	0.09	0.02	0.02	0.05	1,383.87
Time Slice 1/2/2012-2/17/2012	5.96	<u>31.08</u>	<u>0.09</u>	<u>2.36</u>	<u>2.45</u>	<u>0.03</u>	<u>2.17</u>	<u>2.20</u>	<u>4,831.31</u>
Active Days: 35									
Asphalt 11/01/2010-02/17/2012	2.41	14.47	0.01	1.25	1.26	0.00	1.15	1.15	1,485.46
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.05	0.08	0.01	0.00	0.01	0.00	0.00	0.01	204.93
Building 11/01/2010-11/30/2013	3.56	16.61	0.08	1.11	1.19	0.03	1.02	1.05	3,345.85
Building Off Road Diesel	3.14	14.81	0.00	1.04	1.04	0.00	0.95	0.95	1,621.20
Building Vendor Trips	0.11	1.26	0.01	0.05	0.06	0.00	0.04	0.05	340.69
Building Worker Trips	0.31	0.54	0.07	0.03	0.10	0.02	0.02	0.05	1,383.96

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Time Slice 12/2/2013-12/31/2013	9.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Active Days: 22									
Coating 04/08/2012-02/28/2014	9.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Architectural Coating	9.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Time Slice 1/1/2014-2/28/2014	<u>9.12</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>10.90</u>
Active Days: 43									
Coating 04/08/2012-02/28/2014	9.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Architectural Coating	9.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90

Phase Assumptions

Phase: Demolition 6/6/2010 - 7/30/2010 - Default Demolition Description

Building Volume Total (cubic feet): 909937.8

Building Volume Daily (cubic feet): 50000

On Road Truck Travel (VMT): 694.44

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 8/2/2010 - 10/29/2010 - Default fine site grading Description

Total Acres Disturbed: 9.69

Maximum Daily Acreage Disturbed: 2.42

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 400

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

Page: 8

8/2/2010 4:58:08 PM

- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 9/27/2010 - 11/27/2010 - Default Trenching

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 11/1/2010 - 2/17/2012 - Default Paving

Acres to be Paved: 2.42

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/1/2010 - 11/30/2013 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/8/2012 - 2/28/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

8/2/2010 4:58:08 PM

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 6/7/2010-7/30/2010	2.43	26.28	<u>21.10</u>	0.82	<u>21.92</u>	<u>4.40</u>	0.75	<u>5.15</u>	3,598.59
Active Days: 40									
Demolition 06/06/2010-07/30/2010	2.43	26.28	21.10	0.82	21.92	4.40	0.75	5.15	3,598.59
Fugitive Dust	0.00	0.00	21.00	0.00	21.00	4.37	0.00	4.37	0.00
Demo Off Road Diesel	1.14	7.68	0.00	0.11	0.11	0.00	0.10	0.10	700.30
Demo On Road Diesel	1.26	18.55	0.10	0.71	0.81	0.03	0.65	0.69	2,795.84
Demo Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Time Slice 8/2/2010-9/24/2010	3.76	35.72	15.56	0.60	16.16	3.26	0.55	3.81	3,960.17
Active Days: 40									
Fine Grading 08/02/2010-10/29/2010	3.76	35.72	15.56	0.60	16.16	3.26	0.55	3.81	3,960.17
Fine Grading Dust	0.00	0.00	15.50	0.00	15.50	3.24	0.00	3.24	0.00
Fine Grading Off Road Diesel	3.00	24.99	0.00	0.19	0.19	0.00	0.17	0.17	2,247.32
Fine Grading On Road Diesel	0.73	10.68	0.06	0.41	0.47	0.02	0.38	0.40	1,610.40
Fine Grading Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45

8/2/2010 4:58:08 PM

Time Slice 9/27/2010-10/29/2010	5.84	<u>53.46</u>	15.56	0.93	16.50	3.26	0.86	4.12	5,777.26
Active Days: 25									
Fine Grading 08/02/2010-10/29/2010	3.76	35.72	15.56	0.60	16.16	3.26	0.55	3.81	3,960.17
Fine Grading Dust	0.00	0.00	15.50	0.00	15.50	3.24	0.00	3.24	0.00
Fine Grading Off Road Diesel	3.00	24.99	0.00	0.19	0.19	0.00	0.17	0.17	2,247.32
Fine Grading On Road Diesel	0.73	10.68	0.06	0.41	0.47	0.02	0.38	0.40	1,610.40
Fine Grading Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Trenching 09/27/2010-11/27/2010	2.09	17.74	0.00	0.33	0.34	0.00	0.31	0.31	1,817.09
Trenching Off Road Diesel	2.06	17.69	0.00	0.33	0.33	0.00	0.30	0.30	1,714.64
Trenching Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45
Time Slice 11/1/2010-11/26/2010	<u>8.96</u>	52.68	0.10	<u>1.53</u>	1.62	0.03	<u>1.40</u>	1.44	<u>6,648.15</u>
Active Days: 20									
Asphalt 11/01/2010-02/17/2012	2.72	16.12	0.01	0.46	0.47	0.00	0.42	0.42	1,485.44
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.64	15.97	0.00	0.45	0.45	0.00	0.42	0.42	1,272.04
Paving On Road Diesel	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.06	0.10	0.01	0.00	0.01	0.00	0.00	0.01	204.90
Building 11/01/2010-11/30/2013	4.16	18.81	0.08	0.74	0.82	0.03	0.67	0.70	3,345.63
Building Off Road Diesel	3.65	16.55	0.00	0.65	0.65	0.00	0.59	0.59	1,621.20
Building Vendor Trips	0.13	1.62	0.01	0.06	0.08	0.00	0.06	0.06	340.62
Building Worker Trips	0.38	0.65	0.07	0.03	0.09	0.02	0.02	0.05	1,383.81
Trenching 09/27/2010-11/27/2010	2.09	17.74	0.00	0.33	0.34	0.00	0.31	0.31	1,817.09
Trenching Off Road Diesel	2.06	17.69	0.00	0.33	0.33	0.00	0.30	0.30	1,714.64
Trenching Worker Trips	0.03	0.05	0.00	0.00	0.01	0.00	0.00	0.00	102.45

8/2/2010 4:58:08 PM

Time Slice 11/29/2010-12/31/2010	6.88	34.94	0.09	1.19	1.28	0.03	1.09	1.13	4,831.06
Active Days: 25									
Asphalt 11/01/2010-02/17/2012	2.72	16.12	0.01	0.46	0.47	0.00	0.42	0.42	1,485.44
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.64	15.97	0.00	0.45	0.45	0.00	0.42	0.42	1,272.04
Paving On Road Diesel	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.06	0.10	0.01	0.00	0.01	0.00	0.00	0.01	204.90
Building 11/01/2010-11/30/2013	4.16	18.81	0.08	0.74	0.82	0.03	0.67	0.70	3,345.63
Building Off Road Diesel	3.65	16.55	0.00	0.65	0.65	0.00	0.59	0.59	1,621.20
Building Vendor Trips	0.13	1.62	0.01	0.06	0.08	0.00	0.06	0.06	340.62
Building Worker Trips	0.38	0.65	0.07	0.03	0.09	0.02	0.02	0.05	1,383.81
Time Slice 1/3/2011-12/30/2011	<u>6.40</u>	<u>32.98</u>	<u>0.09</u>	<u>1.13</u>	<u>1.23</u>	<u>0.03</u>	<u>1.04</u>	<u>1.07</u>	<u>4,831.16</u>
Active Days: 260									
Asphalt 11/01/2010-02/17/2012	2.55	15.29	0.01	0.43	0.45	0.00	0.40	0.40	1,485.45
Paving Off-Gas	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	0.00	0.43	0.43	0.00	0.39	0.39	1,272.04
Paving On Road Diesel	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	8.49
Paving Worker Trips	0.05	0.09	0.01	0.00	0.01	0.00	0.00	0.01	204.91
Building 11/01/2010-11/30/2013	3.85	17.69	0.08	0.70	0.78	0.03	0.64	0.67	3,345.72
Building Off Road Diesel	3.39	15.67	0.00	0.62	0.62	0.00	0.57	0.57	1,621.20
Building Vendor Trips	0.12	1.43	0.01	0.06	0.07	0.00	0.05	0.05	340.65
Building Worker Trips	0.34	0.59	0.07	0.03	0.09	0.02	0.02	0.05	1,383.87

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8/2/2010 4:58:08 PM

Time Slice 1/1/2013-11/29/2013	<u>7.58</u>	<u>15.51</u>	<u>0.08</u>	<u>0.60</u>	<u>0.68</u>	<u>0.03</u>	<u>0.54</u>	<u>0.57</u>	<u>3,356.94</u>
Active Days: 239									
Building 11/01/2010-11/30/2013	3.26	15.51	0.08	0.59	0.68	0.03	0.54	0.57	3,346.04
Building Off Road Diesel	2.88	13.91	0.00	0.52	0.52	0.00	0.48	0.48	1,621.20
Building Vendor Trips	0.10	1.11	0.01	0.04	0.06	0.00	0.04	0.04	340.74
Building Worker Trips	0.28	0.49	0.07	0.03	0.10	0.02	0.02	0.05	1,384.10
Coating 04/08/2012-02/28/2014	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Architectural Coating	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Time Slice 12/2/2013-12/31/2013	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Active Days: 22									
Coating 04/08/2012-02/28/2014	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Architectural Coating	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Time Slice 1/1/2014-2/28/2014	<u>0.71</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>10.90</u>
Active Days: 43									
Coating 04/08/2012-02/28/2014	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90
Architectural Coating	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.90

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 6/6/2010 - 7/30/2010 - Default Demolition Description

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Fine Grading 8/2/2010 - 10/29/2010 - Default fine site grading Description

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

Page: 14

8/2/2010 4:58:08 PM

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Trenching 9/27/2010 - 11/27/2010 - Default Trenching

For Excavators, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Paving 11/1/2010 - 2/17/2012 - Default Paving

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Building Construction 11/1/2010 - 11/30/2013 - Default Building Construction Description

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

Page: 15

8/2/2010 4:58:08 PM

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

The following mitigation measures apply to Phase: Architectural Coating 4/8/2012 - 2/28/2014 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

Page: 1

8/4/2010 1:43:31 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: L:\ESPI\VTA Co\VTA, City of\VTA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\12 bed+104 K+3.9 K oper.urb924

Project Name: 12¹⁰ bed 104 K reuse 3.9 k retail

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Phase I operational

10 bed Hospital, 104 K Adaptive
Reuse

3.9 K Retail

8/4/2010 1:43:31 PM

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	1.11	0.85	5.30	0.00	0.02	0.02	951.67
TOTALS (lbs/day, mitigated)	1.10	0.69	5.17	0.00	0.02	0.02	763.02
Percent Reduction	0.90	18.82	2.45	NaN	0.00	0.00	19.82

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	21.49	23.20	258.32	0.29	2.41	1.43	29,640.52
TOTALS (lbs/day, mitigated)	18.27	19.54	217.62	0.25	2.03	1.21	24,970.79
Percent Reduction	14.98	15.78	15.76	13.79	15.77	15.38	15.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	22.60	24.05	263.62	0.29	2.43	1.45	30,592.19
TOTALS (lbs/day, mitigated)	19.37	20.23	222.79	0.25	2.05	1.23	25,733.81
Percent Reduction	14.29	15.88	15.49	13.79	15.64	15.17	15.88

Page: 3

8/4/2010 1:43:31 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.06	0.79	0.66	0.00	0.00	0.00	943.24
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	0.68						
TOTALS (lbs/day, unmitigated)	1.11	0.85	5.30	0.00	0.02	0.02	951.67

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.05	0.63	0.53	0.00	0.00	0.00	754.59
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	0.68						
TOTALS (lbs/day, mitigated)	1.10	0.69	5.17	0.00	0.02	0.02	763.02

Area Source Changes to Defaults

Page: 4

8/4/2010 1:43:31 PM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Strip mall	0.87	0.95	10.48	0.01	0.10	0.06	1,207.38
Medical office building	19.90	21.54	239.79	0.27	2.24	1.33	27,520.65
Hospital	0.72	0.71	8.05	0.01	0.07	0.04	912.49
TOTALS (lbs/day, unmitigated)	21.49	23.20	258.32	0.29	2.41	1.43	29,640.52

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Strip mall	0.74	0.80	8.83	0.01	0.08	0.05	1,017.16
Medical office building	16.91	18.14	202.01	0.23	1.89	1.12	23,184.90
Hospital	0.62	0.60	6.78	0.01	0.06	0.04	768.73
TOTALS (lbs/day, mitigated)	18.27	19.54	217.62	0.25	2.03	1.21	24,970.79

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Strip mall		42.94	1000 sq ft	3.90	167.47	1,238.08

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Medical office building		36.13	1000 sq ft	104.03	3,758.60	28,191.41
Hospital		11.81	beds	10.00	118.10	931.51
					4,044.17	30,361.00

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.1	0.4	99.4	0.2
Light Truck < 3750 lbs	8.6	1.2	95.3	3.5
Light Truck 3751-5750 lbs	23.9	0.4	99.6	0.0
Med Truck 5751-8500 lbs	11.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	0.8	0.0	25.0	75.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.2	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.6	52.2	47.8	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.5	0.0	86.7	13.3

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
Medical office building				7.0	3.5	89.5
Hospital				25.0	12.5	62.5

Phase I annual CO₂

Page: 1

8/4/2010 2:03:10 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: L:\ESPI\VTA Co\VTA, City of\VTA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\12 bed+104 K+3.9 K oper.urb924

Project Name: 12 bed 104 K reuse 3.9 k retail

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Page: 2

8/4/2010 2:03:10 PM

Summary Report: *Summary Report*

AREA SOURCE EMISSION ESTIMATES

	<u>CO2</u>
TOTALS (tons/year, unmitigated)	172.90
TOTALS (tons/year, mitigated)	138.47
Percent Reduction	19.91

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5,161.74
TOTALS (tons/year, mitigated)	4,348.52
Percent Reduction	15.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5,334.64
TOTALS (tons/year, mitigated)	4,486.99
Percent Reduction	15.89

8/4/2010 2:07:00 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: L:\ESPI\TA Co\TA, City of\TA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\Construction Phase II.urb924

Project Name: CMH Construction phase II

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Phase II Construction 162.95 kSF
medical
Office

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2014 TOTALS (lbs/day unmitigated)	2.90	19.11	17.49	0.01	42.40	1.07	43.29	8.86	0.99	9.67	2,953.10
2014 TOTALS (lbs/day mitigated)	2.90	19.11	17.49	0.01	23.98	1.07	24.87	5.01	0.99	5.83	2,953.10
2015 TOTALS (lbs/day unmitigated)	10.51	13.02	16.73	0.01	0.06	0.81	0.88	0.02	0.75	0.77	2,962.59
2015 TOTALS (lbs/day mitigated)	10.51	13.02	16.73	0.01	0.06	0.81	0.88	0.02	0.75	0.77	2,962.59
2016 TOTALS (lbs/day unmitigated)	10.27	12.08	16.03	0.01	0.06	0.72	0.78	0.02	0.66	0.68	2,962.52
2016 TOTALS (lbs/day mitigated)	10.27	12.08	16.03	0.01	0.06	0.72	0.78	0.02	0.66	0.68	2,962.52

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

8/4/2010 2:07:00 PM

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 4/28/2014-8/1/2014	2.43	<u>19.11</u>	11.39	0.00	<u>42.40</u>	0.89	<u>43.29</u>	<u>8.86</u>	0.82	<u>9.67</u>	2,349.80
Active Days: 70											
Fine Grading 04/28/2014-08/01/2014	2.43	19.11	11.39	0.00	42.40	0.89	43.29	8.86	0.82	9.67	2,349.80
Fine Grading Dust	0.00	0.00	0.00	0.00	42.40	0.00	42.40	8.85	0.00	8.85	0.00
Fine Grading Off Road Diesel	2.41	19.08	10.74	0.00	0.00	0.89	0.89	0.00	0.82	0.82	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.03	0.65	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.48
Time Slice 8/4/2014-10/10/2014	2.23	13.16	10.23	0.00	0.01	<u>1.07</u>	1.08	0.00	<u>0.99</u>	0.99	1,527.61
Active Days: 50											
Asphalt 08/04/2014-10/10/2014	2.23	13.16	10.23	0.00	0.01	1.07	1.08	0.00	0.99	0.99	1,527.61
Paving Off-Gas	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.06	12.89	8.85	0.00	0.00	1.06	1.06	0.00	0.98	0.98	1,272.04
Paving On Road Diesel	0.02	0.20	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	50.60
Paving Worker Trips	0.04	0.07	1.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.97
Time Slice 10/13/2014-12/31/2014	<u>2.90</u>	14.08	<u>17.49</u>	<u>0.01</u>	0.06	0.88	0.94	0.02	0.80	0.83	<u>2,953.10</u>
Active Days: 58											
Building 10/13/2014-10/28/2016	2.90	14.08	17.49	0.01	0.06	0.88	0.94	0.02	0.80	0.83	2,953.10
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	0.07	0.75	0.81	0.00	0.01	0.03	0.04	0.00	0.03	0.03	263.12
Building Worker Trips	0.20	0.35	6.80	0.01	0.05	0.02	0.07	0.02	0.02	0.04	1,068.79

[illegible]

Page: 4

8/4/2010 2:07:00 PM

Time Slice 10/31/2016-12/19/2016	7.86	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Active Days: 36											
Coating 04/08/2015-12/19/2016	7.86	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Architectural Coating	7.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40

Phase Assumptions

Phase: Fine Grading 4/28/2014 - 8/1/2014 - Default Fine Site Grading Description

Total Acres Disturbed: 8.48

Maximum Daily Acreage Disturbed: 2.12

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 8/4/2014 - 10/10/2014 - Default Paving Description

Acres to be Paved: 2.12

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 10/13/2014 - 10/28/2016 - Default Building Construction Description

Page: 5

8/4/2010 2:07:00 PM

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/8/2015 - 12/19/2016 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
Time Slice 4/28/2014-8/1/2014	2.43	<u>19.11</u>	11.39	0.00	<u>23.98</u>	0.89	<u>24.87</u>	<u>5.01</u>	0.82	<u>5.83</u>	2,349.80
Active Days: 70											
Fine Grading 04/28/2014-08/01/2014	2.43	19.11	11.39	0.00	23.98	0.89	24.87	5.01	0.82	5.83	2,349.80
Fine Grading Dust	0.00	0.00	0.00	0.00	23.98	0.00	23.98	5.01	0.00	5.01	0.00
Fine Grading Off Road Diesel	2.41	19.08	10.74	0.00	0.00	0.89	0.89	0.00	0.82	0.82	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.02	0.03	0.65	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.48

Page: 6

8/4/2010 2:07:00 PM

Time Slice 8/4/2014-10/10/2014 Active Days: 50	2.23	13.16	10.23	0.00	0.01	<u>1.07</u>	1.08	0.00	<u>0.99</u>	0.99	1,527.61
Asphalt 08/04/2014-10/10/2014	2.23	13.16	10.23	0.00	0.01	1.07	1.08	0.00	0.99	0.99	1,527.61
Paving Off-Gas	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.06	12.89	8.85	0.00	0.00	1.06	1.06	0.00	0.98	0.98	1,272.04
Paving On Road Diesel	0.02	0.20	0.07	0.00	0.00	0.01	0.01	0.00	0.01	0.01	50.60
Paving Worker Trips	0.04	0.07	1.30	0.00	0.01	0.00	0.01	0.00	0.00	0.01	204.97
Time Slice 10/13/2014-12/31/2014 Active Days: 58	<u>2.90</u>	14.08	<u>17.49</u>	<u>0.01</u>	0.06	0.88	0.94	0.02	0.80	0.83	<u>2,953.10</u>
Building 10/13/2014-10/28/2016	2.90	14.08	17.49	0.01	0.06	0.88	0.94	0.02	0.80	0.83	2,953.10
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	0.07	0.75	0.81	0.00	0.01	0.03	0.04	0.00	0.03	0.03	263.12
Building Worker Trips	0.20	0.35	6.80	0.01	0.05	0.02	0.07	0.02	0.02	0.04	1,068.79
Time Slice 1/1/2015-4/7/2015 Active Days: 69	2.65	13.02	16.67	0.01	0.06	0.81	0.87	0.02	0.75	0.77	2,953.19
Building 10/13/2014-10/28/2016	2.65	13.02	16.67	0.01	0.06	0.81	0.87	0.02	0.75	0.77	2,953.19
Building Off Road Diesel	2.40	12.04	9.62	0.00	0.00	0.76	0.76	0.00	0.70	0.70	1,621.20
Building Vendor Trips	0.07	0.66	0.75	0.00	0.01	0.03	0.04	0.00	0.02	0.03	263.15
Building Worker Trips	0.18	0.32	6.30	0.01	0.05	0.02	0.08	0.02	0.02	0.04	1,068.84

8/4/2010 2:07:00 PM

Time Slice 4/8/2015-12/31/2015	<u>10.51</u>	<u>13.02</u>	<u>16.73</u>	<u>0.01</u>	<u>0.06</u>	<u>0.81</u>	<u>0.88</u>	<u>0.02</u>	<u>0.75</u>	<u>0.77</u>	<u>2,962.59</u>
Active Days: 192											
Building 10/13/2014-10/28/2016	2.65	13.02	16.67	0.01	0.06	0.81	0.87	0.02	0.75	0.77	2,953.19
Building Off Road Diesel	2.40	12.04	9.62	0.00	0.00	0.76	0.76	0.00	0.70	0.70	1,621.20
Building Vendor Trips	0.07	0.66	0.75	0.00	0.01	0.03	0.04	0.00	0.02	0.03	263.15
Building Worker Trips	0.18	0.32	6.30	0.01	0.05	0.02	0.08	0.02	0.02	0.04	1,068.84
Coating 04/08/2015-12/19/2016	7.86	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Architectural Coating	7.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Time Slice 1/1/2016-10/28/2016	<u>10.27</u>	<u>12.08</u>	<u>16.03</u>	<u>0.01</u>	<u>0.06</u>	<u>0.72</u>	<u>0.78</u>	<u>0.02</u>	<u>0.66</u>	<u>0.68</u>	<u>2,962.52</u>
Active Days: 216											
Building 10/13/2014-10/28/2016	2.41	12.08	15.98	0.01	0.06	0.72	0.78	0.02	0.66	0.68	2,953.12
Building Off Road Diesel	2.19	11.19	9.40	0.00	0.00	0.67	0.67	0.00	0.62	0.62	1,621.20
Building Vendor Trips	0.06	0.59	0.70	0.00	0.01	0.02	0.03	0.00	0.02	0.02	263.17
Building Worker Trips	0.17	0.29	5.88	0.01	0.05	0.02	0.08	0.02	0.02	0.04	1,068.76
Coating 04/08/2015-12/19/2016	7.86	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Architectural Coating	7.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Time Slice 10/31/2016-12/19/2016	7.86	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Active Days: 36											
Coating 04/08/2015-12/19/2016	7.86	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40
Architectural Coating	7.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.40

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 4/28/2014 - 8/1/2014 - Default Fine Site Grading Description

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

Page: 1

8/4/2010 1:53:14 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: L:\ESP\VTA Co\VTA, City of\VTA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\117.44 K new use.urb924

Project Name: Adaptive Reuse Hospital

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Phase II operational

Page: 2

8/4/2010 1:53:14 PM

Summary Report

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.87	0.80	2.21	0.00	0.01	0.01	942.33
TOTALS (lbs/day, mitigated)	0.86	0.65	2.08	0.00	0.01	0.01	754.43
Percent Reduction	1.15	18.75	5.88	NaN	0.00	0.00	19.94

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	22.46	24.31	270.70	0.31	2.53	1.50	31,068.20
TOTALS (lbs/day, mitigated)	19.09	20.48	228.05	0.26	2.13	1.27	26,173.55
Percent Reduction	15.00	15.75	15.76	16.13	15.81	15.33	15.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	23.33	25.11	272.91	0.31	2.54	1.51	32,010.53
TOTALS (lbs/day, mitigated)	19.95	21.13	230.13	0.26	2.14	1.28	26,927.98
Percent Reduction	14.49	15.85	15.68	16.13	15.75	15.23	15.88

Page: 3

8/4/2010 1:53:14 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.06	0.78	0.66	0.00	0.00	0.00	939.52
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.69						
TOTALS (lbs/day, unmitigated)	0.87	0.80	2.21	0.00	0.01	0.01	942.33

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Medical office building	22.46	24.31	270.70	0.31	2.53	1.50	31,068.20
TOTALS (lbs/day, unmitigated)	22.46	24.31	270.70	0.31	2.53	1.50	31,068.20

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2014 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Medical office building		36.13	1000 sq ft	117.44	4,243.11	31,825.43
					4,243.11	31,825.43

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.1	0.4	99.4	0.2
Light Truck < 3750 lbs	8.6	1.2	95.3	3.5
Light Truck 3751-5750 lbs	23.9	0.4	99.6	0.0
Med Truck 5751-8500 lbs	11.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.9	0.0	78.9	21.1
Lite-Heavy Truck 10,001-14,000 lbs	0.6	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	0.8	0.0	25.0	75.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.2	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	0.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	4.6	52.2	47.8	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.5	0.0	86.7	13.3

Travel Conditions

	Residential				Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4

	<u>Travel Conditions</u>					
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Medical office building				7.0	3.5	89.5

Page: 1

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: L:\ESP\VTA Co\VTA, City of\VTA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\117.44 K new use.urb924

Project Name: Adaptive Reuse Hospital

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Phase II annual CO₂

Page: 2

8/4/2010 1:56:03 PM

Summary Report: 08/04/2010 1:56:03 PM

AREA SOURCE EMISSION ESTIMATES

CO2

TOTALS (tons/year, unmitigated)	171.71
TOTALS (tons/year, mitigated)	137.42
Percent Reduction	19.97

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

CO2

TOTALS (tons/year, unmitigated)	5,410.34
TOTALS (tons/year, mitigated)	4,557.97
Percent Reduction	15.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

CO2

TOTALS (tons/year, unmitigated)	5,582.05
TOTALS (tons/year, mitigated)	4,695.39
Percent Reduction	15.88

Page: 1

8/4/2010 1:58:28 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: L:\ESP\VTA Co\VTA, City of\VTA, City of\08-63520 VTA Comm Mem Hosp EIR\Document\Old\ADEIR\Appendices\C AQ calcs\source files\12 bed+104 K+3.9 K oper.urb924

Project Name: 12 bed 104 K reuse 3.9 k retail

Project Location: Ventura County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Page: 2

8/4/2010 1:58:28 PM

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	<u>CO2</u>
TOTALS (tons/year, unmitigated)	172.90
TOTALS (tons/year, mitigated)	138.47
Percent Reduction	19.91

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5,161.74
TOTALS (tons/year, mitigated)	4,348.52
Percent Reduction	15.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5,334.64
TOTALS (tons/year, mitigated)	4,486.99
Percent Reduction	15.89

Inhalation Health Risk Exposure to Air Contaminant

Project: CMH Hospital District Development Code EIR
 Chemical of Concern: Diesel Particulates
 Reference Dose, Inhal (RfDI): 1.43E-03
 Cancer Slope Factor, Inhal (SF1): 1.05E+00
 Chronic Inhalation REL 5 ug/cu m
 Ambient Air Concentration: 0.80 ug/cu m
 Note: Annualized concentration based on maximum one hour at worst case stability

NonCarcinogenic

Chronic Health Risk Equation: Intake/Reference Dose

$$\text{Intake} = \frac{\text{CA} * \text{Inh} * \text{EF} * \text{ED}}{\text{BW} * \text{AT} * 1000 \text{ ug/mg}}$$

Where:

Intake = Daily Dose averaged over lifetime (LADD)
 CA = Concentration in air, ug/cu m
 Inh = Inhalation rate
 EF = Exposure frequency in days per year
 ED = Exposure duration in years
 BW = Body weight, kg
 AT = Averaging time

Note: Absorption through lungs assumed at 100%

	Residential	
	Adult	Child
Inh =	20	10
Operating hours/day =	8	8
Operating days/year =	260	260
EF =	86.7	86.7
ED =	4	4
BW =	70	15
AT =	1460	1460
Intake =	5.43E-05	1.27E-04
Chronic Hazard Quotient =	3.80E-02	8.87E-02
Exceed Criterion (>1)?	No	No

OEHHA Chronic Risk: Annual average concentration/REL
 Maximum 1-Hr all Stabilities: 7.99 ug/cu m
 EPA annualization factor: 0.1

Chronic Hazard Quotient = 0.2
Exceed Criterion (>1)? No

Carcinogenic

Cancer Health Risk Risk = Exposure * Slope Factor

$$\text{Exposure} = \frac{\text{CA} * \text{Inh} * \text{EF} * \text{ED}}{\text{BW} * \text{AT} * 1000 \text{ ug/mg}} \text{ mg/kg-day}$$

Where:

Exposure = Daily Dose averaged over lifetime (LADD)
 CA = Concentration in air, ug/cu m
 Inh = Inhalation rate, m³/day
 EF = Exposure frequency in days per year
 ED = Exposure duration in years
 AT = Averaging time
 BW = Body Weight

Note: Fraction absorbed (ABS) assumed to be 100%

	Residential	
	Adult	Child
Inh =	20	10
Operating hours/day =	8	8
Operating days/year =	260	260
EF =	86.7	86.7
ED =	4	4
AT =	25550	25550
BW =	70	15
Exposure =	3.10E-06	7.24E-06
Excess Lifetime Cancer Risk =	3.26E-06	7.60E-06
Criterion =	1.0E-05	1.0E-05
Exceed Criterion?	No	No

08/03/10
10:41:41

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

CMH HRA 8.2.10

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
EMISSION RATE (G/(S-M**2)) = .431994E-06
SOURCE HEIGHT (M) = 3.1700
LENGTH OF LARGER SIDE (M) = 143.0000
LENGTH OF SMALLER SIDE (M) = 142.0000
RECEPTOR HEIGHT (M) = 1.5000
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
1.	4.811	5	1.0	1.0	10000.0	3.17	45.
100.	7.852	5	1.0	1.0	10000.0	3.17	43.
200.	4.357	5	1.0	1.0	10000.0	3.17	45.
300.	2.691	5	1.0	1.0	10000.0	3.17	45.
400.	1.887	5	1.0	1.0	10000.0	3.17	45.
500.	1.414	5	1.0	1.0	10000.0	3.17	43.
600.	1.107	5	1.0	1.0	10000.0	3.17	44.
700.	.8949	5	1.0	1.0	10000.0	3.17	44.
800.	.7424	5	1.0	1.0	10000.0	3.17	42.
900.	.6289	5	1.0	1.0	10000.0	3.17	43.
1000.	.5419	5	1.0	1.0	10000.0	3.17	42.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

109.	7.990	5	1.0	1.0	10000.0	3.17	45.
------	-------	---	-----	-----	---------	------	-----

*** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
-------------	-------------------	------	---------------	---------------	---------------	-----------------	------------------

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
-----	-----	-----	-----
SIMPLE TERRAIN	7.990	109.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

Combined Annual Emissions Reports (Tons/Year)

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

[illegible]

Page: 2

8/3/2010 10:35:03 AM

2013 TOTALS (tons/year unmitigated)	1.58	1.85	2.50	0.00	0.01	0.12	0.13	0.00	0.11	0.11	401.27
2013 TOTALS (tons/year mitigated)	0.95	1.85	2.50	0.00	0.01	0.12	0.13	0.00	0.11	0.11	401.27
Percent Reduction	39.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014 TOTALS (tons/year unmitigated)	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
2014 TOTALS (tons/year mitigated)	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
Percent Reduction	92.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.78
4 yrs

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
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[illegible]

[illegible]

Page: 5

8/3/2010 10:35:04 AM

2013	1.58	1.85	2.50	0.00	0.01	0.12	0.13	0.00	0.11	0.11	401.27
Building 11/01/2010-11/30/2013	0.39	1.85	2.49	0.00	0.01	0.12	0.13	0.00	0.11	0.11	399.85
Building Off Road Diesel	0.34	1.66	1.22	0.00	0.00	0.11	0.11	0.00	0.10	0.10	193.73
Building Vendor Trips	0.01	0.13	0.13	0.00	0.00	0.01	0.01	0.00	0.00	0.01	40.72
Building Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	165.40
Coating 04/08/2012-02/28/2014	1.19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42
Architectural Coating	1.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42
2014	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
Coating 04/08/2012-02/28/2014	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
Architectural Coating	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23

Phase Assumptions

Phase: Demolition 6/6/2010 - 7/30/2010 - Default Demolition Description

Building Volume Total (cubic feet): 909937.8

Building Volume Daily (cubic feet): 50000

On Road Truck Travel (VMT): 694.44

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 8/2/2010 - 10/29/2010 - Default fine site grading Description

Total Acres Disturbed: 9.69

Maximum Daily Acreage Disturbed: 2.42

Fugitive Dust Level of Detail: Default

Page: 6

8/3/2010 10:35:04 AM

20 lbs per acre-day

On Road Truck Travel (VMT): 400

Off-Road Equipment:

- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 9/27/2010 - 11/27/2010 - Default Trenching

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 11/1/2010 - 2/17/2012 - Default Paving

Acres to be Paved: 2.42

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 11/1/2010 - 11/30/2013 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Page: 7

8/3/2010 10:35:04 AM

Phase: Architectural Coating 4/8/2012 - 2/28/2014 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Diesel PM Exhaust Total 0.78 tons four years
 1560 lbs four years
 390 lbs year
 1.5 lbs day

With particulate filters &
 low sulfur diesel fuel 0.555 lbs day

$$\frac{0.555 \text{ lbs}}{1 \text{ day}} \times \frac{453.5924 \text{ g}}{1 \text{ lb}} \times \frac{1 \text{ day}}{8 \text{ hrs}} \times \frac{1 \text{ hr}}{60 \text{ min}} \times \frac{1 \text{ min}}{60 \text{ sec}} = \frac{251.7438 \text{ g}}{28800 \text{ sec}} = 0.008741 \text{ g/sec}$$

Site Area 5 acres 4046.86 m² = 20234 m²
 1 acre

Emission Rate = 4.31994E-07

Sides 142.2473198

Greenhouse Gas Emission Worksheet

Constructon Emissions

CMH

From URBEMIS 2007 Construction Output:

Total number of Construction work days: 260
Average day total CO2 (lbs/day): 2,174
Worst day total CH4 (lbs/day): 0
Worst day total N2O (lbs/day): 0

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)*

CH4: 21 GWP
N2O: 310 GWP
1 ton (short, US) = 0.90718474 metric ton

Annual Mobile Emissions:

	Total Emissions	Total CO2e units
CO2 Emissions:	282.62 tons CO2	256 metric tons CO2e
CH4 Emissions:	0.0000 metric tons CH4	0 metric tons CO2e
N2O Emissions:	0.0000 metric tons N2O	0 metric tons CO2e
Project Total:		256 metric tons CO2e

References

* SAR, 1996 conversion factors as reported in Table C.1 of CCAR, January 2009

Greenhouse Gas Emission Worksheet

Mobile Emissions

Community Memorial Hospital Phase I

From URBEMIS 2007 Vehicle Fleet Mix Output:

Daily Vehicle Miles Traveled (VMT): 30,361 (Net: Proposed - Existing)

Annual VMT: 11,081,765

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)
Light Auto	53.6%	0.4	0.2144	0.4	0.2144
Light Truck < 3750 lbs	6.8%	0.5	0.034	0.6	0.0408
Light Truck 3751-5750 lbs	22.8%	0.5	0.114	0.6	0.1368
Med Truck 5751-8500 lbs	10.0%	0.5	0.05	0.6	0.06
Lite-Heavy Truck 8501-10,000 lbs	1.5%	0.12	0.0018	0.2	0.003
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.12	0.0006	0.2	0.001
Med-Heavy Truck 14,001-33,000 lbs	0.9%	0.12	0.00108	0.2	0.0018
Heavy-Heavy Truck 33,001-60,000 lbs	0.5%	0.12	0.0006	0.2	0.001
Other Bus	0.1%	0.5	0.0005	0.6	0.0006
Urban Bus	0.1%	0.5	0.0005	0.6	0.0006
Motorcycle	2.3%	0.09	0.00207	0.01	0.00023
School Bus	0.1%	0.5	0.0005	0.6	0.0006
Motor Home	0.8%	0.12	0.00096	0.2	0.0018
Total			0.422101		0.46243

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

Assume Model year 2000-present, gasoline fueled.

Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.

$$\text{Total Emissions (metric tons)} = \text{Emission Factor by Vehicle Mix (g/mi)} \times \text{Annual VMT(mi)} \times 0.000001 \text{ metric tons/g}$$

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4 23 GWP

N2O 296 GWP

1 ton (short, US) = 0.90718474 metric ton.

Annual Mobile Emissions:

	Total Emissions	Total CO2e units
CO2 Emissions*	5162.0 tons CO2	4,683 metric tons CO2e
CH4 Emissions	4.7 metric tons CH4	107 metric tons CO2e
N2O Emissions:	5.1 metric tons N2O	1,517 metric tons CO2e
Project Total:		6,307 metric tons CO2e

* From URBEMIS 2007 results for mobile sources

Greenhouse Gas Emission Worksheet

Mobile Emissions

Community Memorial Hospital Phase II

From URBEMIS 2007 Vehicle Fleet Mix Output:

Daily Vehicle Miles Traveled (VMT): 31,825 (Net: Proposed - Existing)

Annual VMT: 11,616,125

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)
Light Auto	53.6%	0.4	0.2144	0.4	0.2144
Light Truck < 3750 lbs	6.8%	0.5	0.034	0.6	0.0408
Light Truck 3751-5750 lbs	22.8%	0.5	0.114	0.6	0.1368
Med Truck 5751-8500 lbs	10.0%	0.5	0.05	0.6	0.06
Lite-Heavy Truck 8501-10,000 lbs	1.5%	0.12	0.0018	0.2	0.003
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.12	0.0006	0.2	0.001
Med-Heavy Truck 14,001-33,000 lbs	0.9%	0.12	0.00108	0.2	0.0018
Heavy-Heavy Truck 33,001-60,000 lbs	0.5%	0.12	0.0006	0.2	0.001
Other Bus	0.1%	0.5	0.0005	0.6	0.0006
Urban Bus	0.1%	0.5	0.0005	0.6	0.0006
Motorcycle	2.3%	0.09	0.00207	0.01	0.00023
School Bus	0.1%	0.5	0.0005	0.6	0.0006
Motor Home	0.8%	0.12	0.00096	0.2	0.0016
Total			0.42101		0.46243

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

Assume Model year 2000-present, gasoline fueled.

Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.

$$\text{Total Emissions (metric tons)} = \text{Emission Factor by Vehicle Mix (g/mi)} \times \text{Annual VMT(mi)} \times 0.000001 \text{ metric tons/g}$$

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4 23 GWP

N2O 296 GWP

1 ton (short, US) = 0.90718474 metric ton.

Annual Mobile Emissions:

	Total Emissions	Total CO2e units
CO2 Emissions*	5410.0 tons CO2	4,908 metric tons CO2e
CH4 Emissions:	4.9 metric tons CH4	112 metric tons CO2e
N2O Emissions:	6.4 metric tons N2O	1,590 metric tons CO2e
Project Total:		6,610 metric tons CO2e

* From URBEMIS 2007 results for mobile sources

Greenhouse Gas Emission Worksheet

Operational Emissions

Community Memorial Hospital Phase I

Electricity Generation *	(kWh)		Project units	Project Usage
Retail consumption	14	per SF	3,900	55,770
Hospital consumption	23	per SF	355,667	8,144,774
Medical Office consumption	17	per SF		
			Total	8,200,544

* Generation Factor Source: CAPCOA, January 2008. CEQA and Climate Change.

Total Project Annual kWh: 8,200,544 kWh/year
 Project Annual MWh: 8,201 MWh/year

Emission Factors:
 CO₂ * 804.54 lbs/MWh/year
 CH₄ ** 0.0067 lbs/MWh/year
 N₂O ** 0.0037 lbs/MWh/year

Total Annual Operational Emissions (metric tons) =
 (Electricity Use (kWh) x EF) / 2,204.62 lbs/metric ton

Conversion to Carbon Dioxide Equivalency (CO₂e) Units based on Global Warming Potential (GWP)

CH₄ 23 GWP
 N₂O 296 GWP
 1 ton (short, US) = 0.90718474 metric ton.

Annual Operational Emissions:

	Total Emissions	Total CO ₂ e Units
CO ₂ emissions, electricity:	3298.8330 tons	2992.7 metric tons CO ₂ e
CO ₂ emissions***:	172.0000 tons	156.0 metric tons CO ₂ e
CH ₄ emissions:	0.0249 metric tons	0.6 metric tons CO ₂ e
N ₂ O emissions:	0.0138 metric tons	4.1 metric tons CO ₂ e
Project Total		3,153 metric tons CO₂e

References

- * Table C.1: EPA eGRID CO₂ Electricity Emission Factors by Subregion (Year 2000)
- ** Table C.2: Methane and Nitrous Oxide Electricity Emission Factors by State and Region (Average years 2001-1003)
- *** URBEMIS Annual Emissions output for Area Source emissions; includes natural gas combustion for heating.

Sources: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.
 Third Assessment Report, 2001, U.S. Environmental Protection Agency, U.S. Greenhouse Gas Emissions and Sinks, 1990-2000 (April 2002).

Greenhouse Gas Emission Worksheet

Operational Emissions

Community Memorial Hospital Phase II

Electricity Generation *	(kWh)		Project units	Project Usage
Medical Office consumption	17	per SF	117,000	2,024,100
			Total	2,024,100

* Generation Factor Source: CAPCOA, January 2008. CEQA and Climate Change.

Total Project Annual KWh: 2,024,100 kWh/year
Project Annual MWh: 2,024 MWh/year

Emission Factors:

CO2 * 804.54 lbs/MWh/year
CH4 ** 0.0067 lbs/MWh/year
N2O ** 0.0037 lbs/MWh/year

Total Annual Operational Emissions (metric tons) =
(Electricity Use (kWh) x EF) / 2,204.62 lbs/metric ton

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4 23 GWP
N2O 296 GWP
1 ton (short, US) = 0.90718474 metric ton.

Annual Operational Emissions:

	Total Emissions	Total CO2e Units
CO2 emissions, electricity:	814.2347 tons	738.7 metric tons CO2e
CO2 emissions***:	171.0000 tons	155.1 metric tons CO2e
CH4 emissions:	0.0062 metric tons	0.1 metric tons CO2e
N2O emissions:	0.0034 metric tons	1.0 metric tons CO2e
	Project Total	895 metric tons CO2e

References

* Table C.1: EPA eGRID CO2 Electricity Emission Factors by Subregion (Year 2000)

** Table C.2: Methane and Nitrous Oxide Electricity Emission Factors by State and Region (Average years 2001-1003)

*** URBEMIS Annual Emissions output for Area Source emissions; includes natural gas combustion for heating.

Sources: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 2.2, March 2007.
Third Assessment Report, 2001, U.S. Environmental Protection Agency, U.S. Greenhouse Gas Emissions and Sinks, 1990-2000 (April 2002)

Chapter 2: CMP Network

2009 Ventura County Congestion Management Program

Adopted July 10, 2009

2.4 The Deficiency Plan Requirements and Process

According to California Government Code Section 65089.4(a), "a local jurisdiction shall prepare a deficiency plan when highway or roadway LOS standards are not maintained on segments or intersections of the designated system." The deficiency plan describes the strategies, programs and/or projects that will be implemented to raise the LOS above "F".

The required contents of the deficiency plan are described in Section 65089.4(c)(1) through (4) of the California Government Code and summarized below:

1. An analysis of the cause of the deficiency.
2. A list of improvements necessary for the deficient segment or intersection to maintain the minimum LOS standard of "E", and the estimated costs of the improvements.
3. A list of improvements, programs, or actions, and estimates of costs that will contribute to significant improvements in air quality such as those projects presented in the *Tool Box* in Attachment 1.
4. An action plan that shall be implemented consisting of improvements, programs, or actions identified in item 3 above that are found to be in the interest of the public health, safety and welfare. The action plan shall include a specific implementation schedule and implementation strategies for those jurisdictions that have contributed to the cause of the deficiency in accordance with the process detailed in Exhibits 11 and 12.

The responsibility for the preparation and adoption of the deficiency plan rests with the jurisdiction within which the deficient segment or intersection is located. The responsible local agency is also responsible for the long-term maintenance of any improvements. In addition, the responsible local agency must directly address the land use and environmental impacts resulting from the proposed strategies, programs or improvements.

It is recognized that in some cases a location in one city or the County may be deficient because of traffic generated entirely, or in part, from another city or the County. When a local agency believes this to be the case, the local agency must submit supporting documentation and a request to VCTC to review the matter.

If VCTC makes a finding that other agencies are also responsible in some manner for the deficiency, the lead responsibility for preparing and adopting the deficiency plan still remains with the local agency within which the deficient segment or intersection is located. However, the plan must be developed with the participation of all the jurisdictions contributing to the problem and each must formally adopt the deficiency plan. The final determination of the need for a multi-jurisdictional deficiency plan will be made by the VCTC at a public hearing based, in part,

Attachment 1: Tool Box

2009 Ventura County Congestion Management Program

Adopted July 10, 2009

TOOL BOX

Level of Service (LOS) Improvements for Deficiency Plans

The "Tool Box" presents a variety of improvements, programs and strategies that may be implemented to improve LOS. The projects listed in the Tool Box represent only a partial list of possible improvements. Project sponsors should consult with affected local jurisdictions and transit agencies when developing projects for improving LOS. The list is presented in alphabetical order rather than priority order.

Project	Description
Bicycle Facilities Improvements	Install or increase the number of bicycle lockers and racks at Park-and-Ride lots, bus and rail transfer centers, and bus stops where appropriate. Install bicycle racks on buses. Require the inclusion of bicycle storage facilities in commercial and industrial developments. Require developments employing more than 100 employees to provide showers and changing rooms. Local agencies are encouraged to establish "Bike-and-Ride Lots" which are areas along major routes designated for bicycle storage only.
Bicycle Path Improvements	Widen shoulders or curb side pavements. Re-stripe lanes and/or remove on-street parking to create a wider outside (right) lane for bicycles. Install or modify the sensitivity of loop detectors at intersections to trigger traffic signal changes to allow bicycles to clear the intersection.
Bus Transit Service to New Development	For new development, local agencies, employers and developers shall work with public transit operators and private operators as appropriate to: 1) identify new bus service or service enhancements to new development, and 2) contribute financially toward both capital and operating cost of new service or service improvements. Emphasis shall focus on service that will reduce peak period vehicle trips.
Child Care Facilities	Encourage the development of child care facilities near or at employment sites, transit centers and park-and-ride lots.
Development Design	Require new development at or near employment sites, transit centers, and park-and-ride lots to incorporate retail services (such as Automated Teller Machines, post office substations, dry cleaners, etc.) in the design of the development. Developments should front the street, with direct visual links to bus stops and amenities. Good lighting and shelter are also important. Where practical, parking should be moved to the rear or sides of a development, allowing for direct visual identity of the front or entrance to a building. Include sufficient bicycle parking that is both safe to access at all hours and secure.

Attachment 1: Tool Box

2009 Ventura County Congestion Management Program

Adopted July 10, 2009

ATTACHMENT 1

TOOL BOX (Continued)

Grade Separations	Construct or provide funding for grade separation(s) at congested railroad grade crossings.
Noontime Shuttle Service	Provide shuttle bus service from employment areas to retail, recreation and commercial areas as appropriate.
Pedestrian Signals	Install pedestrian signals on major arterials to enhance safety and encourage walking.
Rail Transit Expansion	Expand rail transit where appropriate. Intergovernmental and institutional arrangements are required to construct, operate and fund expanded rail service.
Ramp Meters	Install ramp meters at strategic freeway locations with bypass lanes for buses and carpools where warranted.
Rideshare	Work with VCTC's Rideshare Office to provide carpool, vanpool, transit and Guaranteed Ride Home Program options to employees.
Road Improvements	Construct road or highway improvements where needed including operational improvements (spot widening at bottlenecks; widening intersections to add turn lanes; auxiliary lanes; road rehabilitation; curve alignment; freeway ramp improvements) and capacity improvements (adding lanes including HOV; new connections and road extensions; new interchanges).
Satellite Work Centers	Establish satellite work centers equipped with telecommunications and computing capabilities and supplies to support services common to all tenants.
Signal Preemption for Transit Vehicle	Equip transit vehicles with signal preemption devices that hold or trigger a green light in order to avoid delays at intersections where appropriate.
Signal Synchronization	Improve traffic signal timing or synchronize signals.
Telecommuting & Flexible Work Schedules	Encourage employers to offer telecommuting and/or alternative work schedules to employees as appropriate.
Transit Fare Subsidies	Subsidize transit fares through employer subsidy programs for employees, from alternative revenue sources to reduce fares, or implement other incentive programs.

ORDINANCE NO. 93-37

AN ORDINANCE OF THE COUNCIL OF THE CITY OF SAN
BUENAVENTURA ESTABLISHING A PROGRAM TO ENHANCE
AIR QUALITY IN THE CITY AND THE OXNARD PLAIN AND
OJAI VALLEY AIRSHEDS

The City Council of the City of San Buenaventura does ordain as follows:

SECTION 1: FINDINGS.

- A. The California Environmental Quality Act ("CEQA"), enacted by the Legislature of the State of California in 1970, and codified at Public Resources Code Sections 21000 et. seq., sets forth various statements of intent in Sections 21000, 21001, and 21002 of the Act. Among other things, those statements of intent declare that:
- (1) It is a matter of statewide concern that the quality of the environment is maintained for the future of the people;
 - (2) There are critical air quality thresholds which are necessary for the health and safety of the people;
 - (3) All agencies of the state government have an obligation to prevent environmental damage and that specific efforts by public and private interests must work together to "...enhance environmental quality and to control environmental pollution"; and,
 - (4) Public agencies are not to approve projects which would have significant adverse effects on the environment unless those significant effects are mitigated in some fashion to levels of insignificance.
- B. Federal Clean Air Act Amendments approved by Congress in 1977 require that all states attain the National Ambient Air Quality Standards by December 31, 1987.
- C. In 1982, Ventura County adopted the Ventura County Air Quality Management Plan ("AQMP") in order to further the intent of the Federal Clean Air Act on a local level.
- D. In 1983, the Ventura County Air Pollution Control Board ("VCAPCB") adopted "Guidelines for the Preparation of Air Quality Impact Analyses" (the "Guidelines") to provide for implementation of relevant portions of CEQA and the AQMP. The Guidelines were updated in 1989 and provide, among other things, specific methodology for evaluating and mitigating air quality impacts.

SECTION 2: Based on CEQA, the Federal Clean Air Act, Ventura County AQMP, and the VCAPCB's Guidelines for Preparation of Air Quality Impact Analyses, the

City Council of the City of San Buenaventura further finds and determines the following:

- A. Air quality is of nationwide, statewide, and local concern as reflected in Federal and state legislation and local regulations.
- B. Air quality in the Oxnard Plain and Ojai Valley Airsheds is of immediate and utmost importance to the City of Ventura in order to maintain a high quality of environment for residents of and visitors to, the City and to maintain the flora and fauna of the region.
- C. Maintenance of air quality must be actively pursued and programs and methods of assuring maintenance should be enacted and implemented through an Air Quality Program applicable in the City of San Buenaventura.
- D. In order to advance the goals, objectives, and policies of the aforementioned statutes, plans, programs, and guidelines, and otherwise improve the air quality of the Oxnard Plain and Ojai Valley Airsheds, the City Council of the City of San Buenaventura now wishes to adopt an Air Quality Program, specify the implementation and processing requirements for an Air Quality Program mitigation fee, and identify and prioritize the measures for which monies from the Air Quality Mitigation fund will be spent.

SECTION 3: The Council of the City of San Buenaventura hereby establishes an Air Quality Program (the "Program") more particularly described in the "Air Quality Program" attached hereto as Exhibit "A" and incorporated herein by reference.

SECTION 4: The Program shall be applicable to all public and private projects that are subject to the requirements of CEQA.

SECTION 5: The Council further declares that the fee payment provisions of the Air Quality Program are intended to be the final option to be employed for mitigation of air quality impacts and should only be used if all other feasible means of mitigation such as project redesign, TDMs, and other on-site or off-site mitigation measures have been incorporated into the project or made conditions of approval of the project and are undertaken by the applicant and the City's EIR Committee finds that (1) all other feasible mitigation measures have been taken; and, (2) mitigation of any residual impacts by payment of the air quality fee is the only remaining available means of mitigating air quality impacts to below the VCAPCB's established air quality threshold.

SECTION 6: SEVERABILITY. If any section, subsection, paragraph, sentence, clause, phrase or word of this ordinance is declared by a court of competent jurisdiction, adjudicated to a final determination, to be invalid, this City Council finds that said invalidated part is severable, and that this City Council would have adopted the remainder of this ordinance without the severed and invalidated part, and that the remainder of this ordinance shall remain in full force and effect.

SECTION 7: EXEMPTION FROM CALIFORNIA ENVIRONMENTAL QUALITY ACT. The City Council hereby determines that this ordinance is exempt from review under the California Environmental Quality Act (California Public Resources Code Section 21000, et. seq., "CEQA") and the regulations promulgated thereunder (14 California Code of Regulations Sections 15000, et. seq., the "State CEQA Guidelines") because it is an action taken to assure the maintenance, enhancement or protection of the environment and to establish regulatory processes which include procedures of the protection of the environment within the scope of CEQA Guidelines Section 15308. It can also be foreseen that any potential environmental impacts would be insignificant. This ordinance, therefore, is an action that does not have the potential to cause significant effects on the environment.

The City Council hereby directs the Director of Community Services or his designee to prepare a Notice of Exemption indicating that this ordinance is exempt pursuant to Title 14 California Code of Regulations Sections 15308 and 15061(b)(3) and to file the Notice of Exemption with the County Clerk of the County of Ventura within five (5) days of the adoption of this ordinance.

SECTION 8: This Ordinance shall take effect on the 60th day after final passage and adoption.

PASSED AND ADOPTED this 6th day of December, 1993.


Mayor

ATTEST


City Clerk

KB/83-312.ORD

STATE OF CALIFORNIA)
COUNTY OF VENTURA) ss
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, California, do hereby certify that the foregoing Ordinance was passed and adopted by the City Council of the City of San Buenaventura at a regular meeting thereof, held on the 6th of December, 1993 by the following vote:

AYES: Councilmembers Buford, Bean, Tuttle, Tingstrom,
 Monahan, Collart and Carson.

NOES: None.

ABSENT: None.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Buenaventura this 7th day of December, 1993.

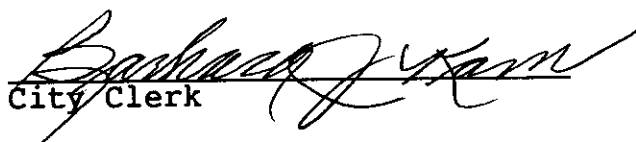

City Clerk

EXHIBIT "A"

AIR QUALITY PROGRAM

A. INTENT:

This Air Quality Program (the "Program") is intended and designed to further the goals, policies, and requirements of the California Environmental Quality Act (CEQA), the Federal Clean Air Act, and the Ventura County Air Quality Management Plan. All projects subject to CEQA proposed within the City of Ventura will be evaluated in accordance with CEQA and, if any such project exceeds the threshold levels for Reactive Organic Compounds (ROC) or Oxides of Nitrogen (NOx) set forth herein, the procedures included in Sections C, D, E, and F of this Program will be followed for that project.

This Program is further intended and designed to reduce the levels of air quality impacts of proposed projects to below the threshold of significance for both ROC and NOx by including procedures for evaluating proposed projects for possible air quality impacts, options for mitigating excessive impacts through on-site mitigation measures, options for mitigating excessive impacts through off-site mitigation measures, procedures for calculating the air quality mitigation fee, establishing an Air Quality Mitigation fund, and a list of measures which the City of Ventura will target for expending the fees collected.

B. PROCEDURES FOR EVALUATING AIR QUALITY IMPACTS:

Based on preparation of an Initial Study per the requirements of CEQA and per the parameters of the 1989 APCD Guidelines referenced in Section F herein, staff will determine if, and to what extent, a proposed project exceeds the air quality thresholds ("the thresholds") set forth in this Air Quality Program.

If the proposed project exceeds any of the thresholds, the project shall be determined to have a significant air quality impact which must, to the extent feasible, be mitigated to a level of insignificance pursuant to CEQA requirements. If feasible on-site mitigation measures, such as those described in Section C herein, are identified in the course of the preparation and evaluation of the Initial Study, and/or an EIR, by the City's Environmental Impact Report (EIR) Committee, those on-site mitigation measures shall be undertaken by the applicant as a condition of project approval.

If no feasible on-site or off-site mitigation measures are identified by the EIR Committee to mitigate the air quality impacts to a level of insignificance pursuant to CEQA, then an Air Quality Program mitigation fee, calculated in accordance with Section F herein, shall be imposed on the project as a condition of approval and paid by the applicant to mitigate the project's significant impacts on air quality.

If an Environmental Impact Report is prepared for a project, all feasible mitigation measures described in this Air Quality Program shall be made conditions of project approval to be carried out by the applicant before the decision-making authority makes any Statement of Overriding Considerations pursuant to State CEQA Guidelines Section 15093.

C. OPTIONS FOR ON-SITE MITIGATION MEASURES:

As a first step towards mitigating any significant air quality impacts generated by a proposed project, the EIR Committee will identify any feasible on-site mitigation measures to be undertaken by the project applicant.

Options for on-site mitigation of air quality impacts include, but are not limited to, the following:

1. Redesign of the project by the applicant to reduce its air quality impacts below all thresholds; or
2. Preparation by the applicant of an on-site Transportation Demand Management (TDM) Plan. In the course of completing the environmental evaluation, the TDM will be reviewed by, and must meet the requirements of, the EIR Committee.

D. OPTIONS FOR OFF-SITE MITIGATION MEASURES:

After the applicant has incorporated all feasible on-site, project-specific mitigation measures set forth in Section C of this Program into the project, the applicant may provide any of the off-site measures listed in Section G herein, subject to the approval of the EIR Committee. If the project still exceeds the air quality thresholds, an Air Quality fee, calculated in accordance with this Program, shall be paid by the project applicant to the City prior to issuance of building permits for the project or prior to initiation of a new or changed land use that has been determined through environmental evaluation to have the potential to create air quality impacts.

E. ESTABLISHMENT OF AIR QUALITY MITIGATION FUND:

All such fees collected will be deposited and set aside in an Air Quality fund established and maintained by the City to be used towards air quality improvement projects identified on the Air Quality Program's Expenditures list set forth in Section G herein.

F. PROCEDURES FOR CALCULATING THE MITIGATION FEE:

The mitigation fee described in Section D will be calculated in accordance with parameters identified in the 1989 APCD Guidelines. Specifically, the following portions of the 1989 APCD Guidelines are hereby incorporated by reference into this Program, as those portions may be amended from time to time:

1. Appendix A, Definition of Land Use Categories for Trip Generation and Project Emission Calculation Purposes;
2. Appendix B, Emissions from Residential Land Uses (based on vehicle trips);
3. Appendix C, Emissions from Commercial, Industrial, and Institutional Facilities (based on vehicle trips);
4. The 25 pound-per-day air quality threshold for all projects located within the incorporated areas of the City of Ventura or in areas

proposed to be incorporated into the City of Ventura which are in the Oxnard Plain Airshed;

5. The 5 pound-per-day air quality threshold for all projects located within the Ojai Valley Airshed. For the purpose of this Program, the Ojai Valley Airshed is the incorporated areas of, or areas proposed to be incorporated into, the City of Ventura which are encompassed within the North Avenue Community and the Avenue Community;
6. Tables 7-3 and 7-4, Calculations for Funding for Ridesharing; such calculations may be used by the EIR Committee for determining, among other things, expected effects of any of the off-site mitigation measures that are listed in Section G herein.
7. Equation 1, as set forth in Section 7.3.8.1, which provides the calculation for Tables 7-3 and 7-4 and as specifically outlined below:

$$\text{"AC (ROC or NOx) = EE (ROC or NOx) times UC (ROC or NOx) times D}$$

where: AC (ROC or NOx) is the annual cost of ROC or NOx reduced
EE is the excess emissions in pounds per day
UC (ROC or NOx) is the unit cost per pound of ROC reduced or per pound of NOx reduced
D is the days of operation of the project per calendar year "

Where the EIR Committee determines that a land use has previously been developed on the site of a proposed project, only the incremental difference between the last known land use and the proposed land use will be considered as being the effects of the project for purposes of determining air quality impacts of the proposed project. The "last known" land use shall be determined by the EIR Committee and may be determined without regard to how long a site has been unused.

If a substantial question of interpretation arises concerning the intent or application of the fee calculation provisions of this Section or any other provisions of this Program, the EIR Committee may ascertain pertinent facts and interpret the provisions in question in accordance with the intent of this Program and Ordinance 93-37 adopting this Program. The EIR Committee interpretation will be final.

G. LIST OF EXPENDITURES:

The following list of Expenditures may be funded in whole or in part by the fees collected pursuant to this Air Quality Program. The Expenditures list has been formulated to specify which off-site improvements may be undertaken by the applicant or the City to mitigate air quality impacts.

Fees deposited in the Air Quality Mitigation fund will be utilized only for expenditures specified in this Program as described below, provided that, this list may be amended from time to time by action of the City Council:

1. Provide an improved transit facility at the Buenaventura Plaza, including informational kiosk(s), shelter(s), and a transit manager.

2. Express transit services between high-use ridership areas.
3. Improve bus stops with capital improvements.
4. Provide financial incentives for large users to use fleet vehicles fueled by alternative fuels. Pay to convert existing fleet vehicles to alternative fuel sources.
5. Fund public transit services.
6. Sponsor and fund vanpools.
7. Develop off-site commuter bike trails.
8. Provide land for and/or develop park-n-ride lots.
9. Provide seed funding for the development of a Transportation Management Association ("TMA"); the TMA would implement transportation management strategies in a given area, such as: transit/shuttle/van service, marketing, promotion, development of a teleconferencing center, telecommuting programs, and coordination of rideshare matching.

KB/83-311.DOC

EXHIBIT "B"

SURVEY OF HOW OTHER VENTURA COUNTY CITIES ADDRESS AIR QUALITY IMPACTS

Planning staff conducted a survey of the eight (8) other Ventura County cities to determine how each of them evaluate and address air quality impacts for proposed projects. The 1989 County Air Pollution Control District ("APCD") Guidelines are the latest version of the County regulations for calculating air quality impacts and calculating mitigation fees for impacts which are found to be over the threshold. The threshold for impact levels considered not significant versus significant are 25 pounds per day for the Oxnard Plain Airshed (all cities except Ojai) and 5 pounds per day for the Ojai Valley Airshed (Ojai and the Avenue Community in Ventura).

The APCD Guidelines cite a buydown of three (3) years as being adequate for mitigation of air quality impacts. What that means is that a developer would be assessed a fee for any air quality emissions greater than the established threshold for the pertinent airshed. Once that fee is determined, it is multiplied by three (3) to correspond to a three (3) year buydown of air quality impacts. In other words, APCD concludes that paying a fee for three (3) year's worth of excess emissions is a reasonable and fair mitigation rather than assessing the developer for the full "life" of the project.

The following is a brief summary of the methodology which is used by each jurisdiction in evaluating air quality impacts for proposed projects.

OXNARD:

Use the 25 pound threshold in 1989 APCD Guidelines.

Use 3 year buydown.

Have not collected enough money to start their program - have about \$60,000 now. Use APCD Guidelines to determine fees to collect when over the threshold.

Walmart constructed 17 miles of bike trails.

Items they will use the money on will be bike trails, CNG fuel stations, changing fleet vehicles to CNG, bus shelters, and bike storage facilities.

OJAI:

Use the 5 pound threshold in 1989 APCD Guidelines.

Use 3 year buydown.

Have not had any projects over the threshold yet.

THOUSAND OAKS:

Use the 25 pound threshold in 1989 APCD Guidelines.

Use 3 year buydown.

Use the money for various projects that have been approved by APCD.

MOORPARK:

Use the 25 pound threshold in 1989 Guidelines.

Use 3 year buydown.

City uses money solely within the City; to date, it's been used on Metrolink Station.



Appendix D
Historic Resources Report

SAN BUENAVENTURA RESEARCH ASSOCIATES

MEMORANDUM

1328 Woodland Drive • Santa Paula CA • 93060

805-525-1909
Fax/Message 888-535-1563
sbra@historicrosources.com
www.historicrosources.com

To: Kaizer Rangwala, Assistant Community Development Director
From: Mitch Stone, San Buenaventura Research Associates
Date: 15 July 2009
Re: Community Memorial Master Plan Historic Resources Report, Revised

SBRA has revised the Historic Resources Report dated 27 March 2009 and presented to the Historic Preservation Committee at their June meeting. The HPC requested additional information on three properties evaluated in the report: 2815 E. Main Street, 2841 Cabrillo Drive and 145 S. Brent Street. The HPC also requested a Ventura City Landmark eligibility evaluation for properties less than 50 years of age. The attached revised report contains this additional information.

Section 3 of the report now contains a subsection summarizing what is presently known about the career of Ventura architect Kenneth Hess.

Section 4 of the revised report contains additional information about properties located at 145 N. Brent Street and 2815 E. Main Street. This additional information was derived primarily from planning files and plans located in the Building Department files. Note that no original plans or Planning Department files could be located for the property at 2841 Cabrillo Drive. SBRA continues to believe, based on a reading of building permits, that it is reasonable to conclude that this property is the combination of buildings constructed between 1968 and 1972 and remodeled to their current appearance in 1991. Note also that all the relevant planning files which were available for examination have been scanned, which has rendered photographs in these files illegible.

Section 5 of the revised report contains an evaluation of the properties at 2815 E. Main Street and 145 N. Brent Street under the Ventura City Landmark criteria as architectural examples and as the works of architect Kenneth Hess. They were not found to be eligible on this basis. No properties which are presently less than 50 years were found to be potentially eligible. Consequently, SBRA's conclusions with respect to the anticipated impacts on historic resources found in Section 6 of the report have not been changed.

Historic Resources Report Community Memorial Hospital Master Plan Ventura, CA

27 March 2009

rev. 15 July 2009

Prepared by:



Prepared for:

Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura CA 93001

Executive Summary

This report was prepared for the purpose of assisting the City of Ventura in their compliance with the California Environmental Quality Act (CEQA) as it relates to historic resources, in connection with the adoption of the Community Memorial Hospital Master Plan. The implementation of this plan would result in the demolition of nine buildings constructed between 1946 and 1978, and the construction of new hospital facilities and access roadways. [Figure 1]

This report assesses the historical and architectural significance of potentially significant historic properties in accordance with the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) Criteria for Evaluation, and City of Ventura criteria. A determination will be made as to whether adverse environmental impacts on historic resources, as defined by CEQA and the CEQA Guidelines, may occur as a consequence of the proposed project, and recommend the adoption of mitigation measures, as appropriate.

This report was prepared by San Buenaventura Research Associates of Santa Paula, California, Judy Triem, Historian; and Mitch Stone, Preservation Planner, for Rincon Consultants, Inc., and is based on a field investigation and research conducted in March 2009 and additional research conducted in July 2009. The conclusions contained herein represent the professional opinions of San Buenaventura Research Associates, and are based on the factual data available at the time of its preparation, the application of the appropriate local, state and federal regulations, and best professional practices.

Summary of Findings

The properties evaluated in this report were found to be ineligible for listing on the NRHP and CRHR ineligible for designation as a City of Ventura landmarks. Consequently, the properties were found to not be historic resources for purposes of CEQA. The proposed project was found to have no potential to adversely impact historic resources.

Report Contents

1.	Administrative Setting	1
	City of San Buenaventura Municipal Code, Sec. 24.455.120	
2.	Impact Thresholds and Mitigation	3
3.	Historical Setting	3
	General Historical Context	
	Site-Specific Context	
4.	Potential Historic Resources	7
	Potentially Historic Properties in the Vicinity	
5.	Eligibility of Historic Resources	9
	National and California Registers: Significance, Eligibility and Integrity	
	Properties Less Than 50 Years of Age	
	Local Significance and Eligibility	
6.	Project Impacts	11
7.	Selected Sources	12

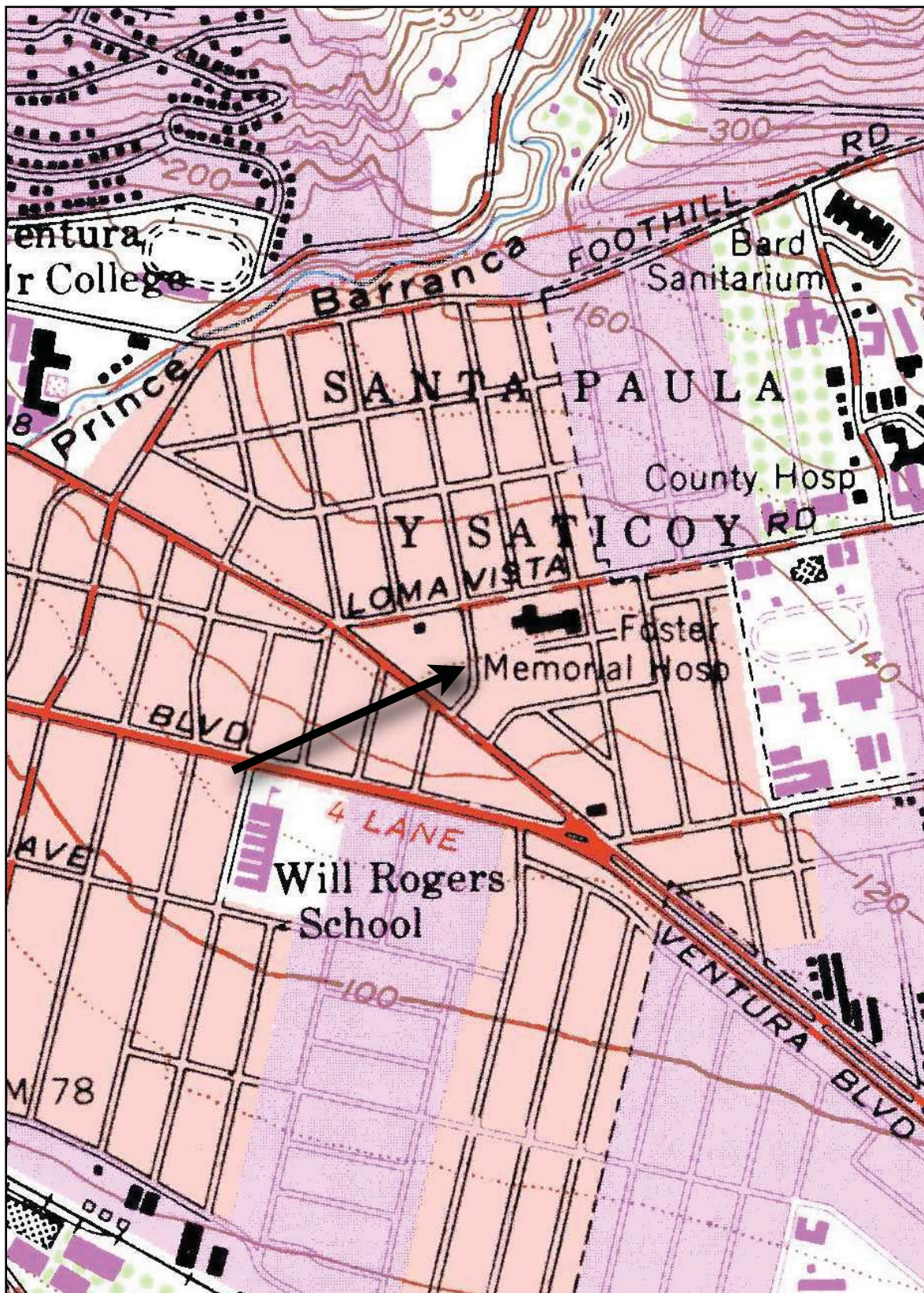


Figure 1. Project Location [Source: USGS 7.5' Quadrangle, Ventura, CA 1951 rev. 1967]

1. Administrative Setting

The California Environmental Quality Act (CEQA) requires evaluation of project impacts on historic resources, including properties “listed in, or determined eligible for listing in, the California Register of Historical Resources [or] included in a local register of historical resources.” A resource is eligible for listing on the California Register of Historical Resources if it meets any of the criteria for listing, which are:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

By definition, the California Register of Historical Resources also includes all “properties formally determined eligible for, or listed in, the National Register of Historic Places,” and certain specified State Historical Landmarks. The majority of “formal determinations” of NRHP eligibility occur when properties are evaluated by the State Office of Historic Preservation in connection with federal environmental review procedures (Section 106 of the National Historic Preservation Act of 1966). Formal determinations of eligibility also occur when properties are nominated to the NRHP, but are not listed due to a lack of owner consent.

The criteria for determining eligibility for listing on the National Register of Historic Places (NRHP) have been developed by the National Park Service. Eligible properties include districts, sites, buildings and structures,

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

According to the NRHP standards, in order for a property which is found to significant under one or more of the criteria to be considered eligible for listing, the “essential physical features” which define the property’s significance must be present. The standard for determining if a property’s essential physical features exist is known as *integrity*, which is defined as “the ability of a property to convey its significance.” The integrity evaluation is broken down into seven “aspects.”

The seven aspects of integrity are: *Location* (the place where the historic property was constructed or the place where the historic event occurred); *Design* (the combination of elements that create the form, plan, space, structure, and style of a property); *Setting* (the physical environment of a historic property); *Materials* (the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property); *Workmanship* (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory); *Feeling* (a property’s expression of the aesthetic or historic sense of a particular period of time), and; *Association* (the direct link between an important historic event or person and a historic property).

The relevant aspects of integrity depend upon the NRHP criteria applied to a property. For example, a property nominated under Criterion A (events), would be likely to convey its significance primarily through integrity of

location, setting and association. A property nominated solely under Criterion C (design) would usually rely primarily upon integrity of design, materials and workmanship. The California Register regulations include similar language with regard to integrity, but also state that “it is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register.” Further, according to the NRHP guidelines, the integrity of a property must be evaluated at the time the evaluation of eligibility is conducted. Integrity assessments cannot be based on speculation with respect to historic fabric and architectural elements which may exist but are not visible to the evaluator, or on restorations which are theoretically possible but which have not occurred. (CCR §4852 (c))

The minimum age criterion for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) is 50 years. Properties less than 50 years old may be eligible for listing on the NRHP if they can be regarded as “exceptional,” as defined by the NRHP procedures, or in terms of the CRHR, “if it can be demonstrated that sufficient time has passed to understand its historical importance” (Chapter 11, Title 14, §4842(d)(2))

Historic resources as defined by CEQA also includes properties listed in “local registers” of historic properties. A “local register of historic resources” is broadly defined in §5020.1 (k) of the Public Resources Code, as “a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.” Local registers of historic properties come essentially in two forms: (1) surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current, and (2) landmarks designated under local ordinances or resolutions. These properties are “presumed to be historically or culturally significant... unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.” (PRC §§ 5024.1, 21804.1, 15064.5)

City of San Buenaventura Municipal Code, Sec. 24.455.120

1. Historic district means a geographically definable area possessing a significant concentration, linkage or continuity of site, buildings, structures and/or objects united by past events, or aesthetically by plan or physical development, regardless of whether such a district may include some buildings, structures, sites, objects, or open spaces that do not contribute to the significance of the district.

A historic district can generally be distinguished from surrounding areas (1) by visual change such as building density, scale, type, age, or style; or (2) by historic documentation of different associations or patterns of development. The number of nonsignificant properties a historic district can contain yet still convey its sense of time and place and historical development depends on how these properties impact the historic district's integrity.

2. Landmark means any real property such as building, structure, or archaeological excavation, or object that is unique or significant because of its location, design, setting, materials, workmanship or aesthetic feeling, and is associated with:
 - (a) Events that have made a meaningful contribution to the nation, state or community;
 - (b) Lives of persons who made a meaningful contribution to national, state or local history;
 - (c) Reflecting or exemplifying a particular period of the national, state or local history;
 - (d) Embodying the distinctive characteristics of a type, period or method of construction;

- (e) The work of one or more master builders, designers, artists or architects whose talents influenced their historical period, or work that otherwise possesses high artistic value;
- (f) Representing a significant and distinguishable entity whose components may lack individual distinction; or
- (g) Yielding, or likely to yield, information important to national, state or local history or prehistory.

3. Point of interest means any real property or object:

- (a) That is the site of a building, structure or object that no longer exists but was associated with historic events, important persons, or embodied a distinctive character of architectural style;
- (b) That has historic significance, but was altered to the extent that the integrity of the original workmanship, materials or style is substantially compromised;
- (c) That is the site of a historic event which has no distinguishable characteristics other than that a historic event occurred there and the historic significance is sufficient to justify the establishment of a historic landmark. (Ord. No. 2005-004, § 3, 5-2-05)

2. Impact Thresholds and Mitigation

According to the Public Resources Code, “a project that may cause a substantial change in the significance of an historical resource is a project that may have a significant effect on the environment.” The Public Resources Code broadly defines a threshold for determining if the impacts of a project on a historic property will be significant and adverse. By definition, a substantial adverse change means, “demolition, destruction, relocation, or alterations,” such that the significance of a historical resource would be impaired. For purposes of NRHP eligibility, reductions in a property’s integrity (the ability of the property to convey its significance) should be regarded as potentially adverse impacts. (PRC §21084.1, §5020.1(6))

Further, according to the CEQA Guidelines, “an historical resource is materially impaired when a project... [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources [or] that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.”

The lead agency is responsible for the identification of “potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource.” The specified methodology for determining if impacts are mitigated to less than significant levels are the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* and the *Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), publications of the National Park Service. (PRC §15064.5(b)(3-4))

3. Historical Setting

General Historical Context

The San Buenaventura Mission was founded in 1782 as the ninth and last mission established by Father Junipero Serra as part of Spain’s colonization of Alta California. The mission was constructed a few hundred yards north of the Chumash village called *Shisholop* located near the Pacific Ocean and just east of the mouth of the

Ventura River. The Spanish introduced their building techniques and engineering skills to the Chumash, who then built the adobe and rock church building and surrounding quadrangle.

With the declaration of Mexican independence from Spain in 1822, Alta California fell into the hands of a government in disarray. The Spanish mission system was abandoned, following the Decrees of Secularization in 1833 and 1834, and the lands awarded in the form of large ranchos to the politically well-connected, or to soldiers and civil servants. Nineteen ranchos were awarded to citizens in what would later become Ventura County.

Rancho Ex-Mission, one of the 19 ranchos, was sold to Jose Arnaz, a merchant seaman, in 1846. He, in turn, sold it in 1850 to Don Manuel Rodriguez de Poli, a Spanish physician. Poli sold small lots west of the Mission to Californios who built adobe dwellings. In 1861 the Mission church and buildings were returned to the Catholic Church by President Abraham Lincoln.

In 1866 San Buenaventura was the first town, in what would later be Ventura County, to incorporate. The streets and blocks were laid out in a gridiron plan with the Mission at its center. In 1869 the official town map was adopted, bounded by the Ventura River on the west; Ash Street on the east; Poli Street on the north; and the Pacific Ocean on the South. In 1876 the Eastern Addition to the city was annexed and included the land east of Ash Street to the Sanjon Barranca.

The majority of the approximately 500 early residents of San Buenaventura were of Spanish, Mexican and Native American origin. A small group of Americans and Europeans began to settle in the town in the 1850s and 1860s. A small Chinese settlement was located on Figueroa Street south of the Mission. In 1873 Ventura County was created out of the southeastern portion of Santa Barbara County.

Prior to the 1870s, the majority of adobe and wood frame buildings in the town were located west of the Mission along Main Street, which was also known as the El Camino Real. As new immigrants arrived buildings were constructed to the east and south of the Mission, with Main Street developing as the commercial district. The first buildings were often wood frame and wood clad. By 1877 the first brick buildings began to appear, including the Peirano store across from the Mission.

The establishment of the Ventura Wharf in 1872 brought in many new residents and spurred economic growth by providing better shipping and storage facilities for merchants and a growing number of farmers. By 1874 the population in Ventura was about 1,000, and within two years, that figure almost doubled.

The decade of the 1880s has generally been referred to regionally as “the boom of the eighties,” a result primarily of the arrival of Southern Pacific Railroad, which was completed to Ventura in 1887. Agriculture contributed to this boom as farmers began to produce large amounts of barley, wheat, corn, honey and wool. The Theodosia Burr Shepherd Seed and Plant Company became nationally known. The town expanded its boundaries with 26 new plats laid out between 1886 and 1888. The population grew from 2,000 in 1880 to 3,869 by 1890. New buildings were constructed along Main Street primarily to the east, including two new hotels, the Rose and the Anacapa. Streets were graded, sidewalks laid, and a theater built.

In 1912 the Ventura County Courthouse was built on the hill above California Street, overlooking the town. The placement of this very public building at the east end of Main Street's commercial district, resulted in the migration of the commercial district away from the Mission, which had long been the center of town.

Following the “boom of the eighties,” growth remained steady until the 1920s when another boom was experienced with the opening of the Ventura Avenue oil fields in 1922. During the 1920s, Ventura’s population jumped from 4,156 to 11,603, a 179 percent increase that exceeded Los Angeles’ population increase of 114 percent during the same timeframe. The Ventura Avenue oil field was the catalyst for this growth. The huge success of the oil industry in Ventura brought in thousands of oil workers, geologists, engineers and oil related businesses. The demand for housing was great. The city’s eastern boundary extended from the Sanjon Barranca to Seaward Avenue and beyond with new subdivisions on the hillsides. In downtown, numerous new buildings were constructed, including the California Hotel on Main Street, the opulent new Ventura Theatre on Chestnut Street, the Elks Lodge on Ash and Main streets and the Masonic Lodge on California and Santa Clara streets. The popularity of the automobile and the good roads movement brought better highways. Highway 101 through Ventura County was developed during the 1920s, along what is now Thompson Boulevard. The creation of new subdivisions on the lands immediately to the east of the San Buenaventura Townsite, beginning during the 1920s, became the first major expansion of the city’s boundaries.

World War II saw another jump in population resulting, in part, from the development of the Navy bases at Point Mugu and Port Hueneme. During the Depression of the 1930s building construction had been nearly at a standstill until the end of World War II, when building materials were no longer scarce and building started anew. The late 1950s and early 1960s saw the construction of the Ventura 101 Freeway that greatly impacted the downtown area by dividing the beach area from the balance of the city. Many buildings were demolished for the freeway and for new parking lots in downtown. Also beginning during the postwar era, commercial strip development took root along Thompson Boulevard, forming a new commercial spine of an automobile-oriented character, which progressed steadily eastwards, along with the residential expansion of the city in this direction during the 1940s and 1950s.

The 1960s was the third major boom period for Ventura County, which became the fastest growing county in California. Many events significant to downtown occurred during the 1960s and 1970s. The County Courthouse moved to east Ventura, and the historic courthouse building converted to city hall. In addition, several key businesses left downtown to reopen in the new Buenaventura Mall in east Ventura. These changes led to a deterioration in the downtown, which the city sought to reverse with the formation of a redevelopment agency during the 1970s.

Site-Specific Context

The current Community Memorial Hospital complex is the successor to the E.P. Foster Memorial Hospital building constructed on Loma Vista Road (then, Foothill Road) in 1930-31. Eugene Preston Foster had been one of the founders of Ventura’s first hospital, the Bard Memorial on Poli Street, in 1902. By the late 1920s, the management of the Bard Memorial Hospital (the Big Sisters League) and the staff doctors found themselves mired in a lengthy dispute, resulting in a period of ineffectiveness for the city’s only hospital. This problem, together with the hospital’s small size and age, created an urgency for the construction of a new facility, which was to be known as the Hospital de Buena Ventura. (*Oxnard Daily Courier*, 5-29-1928)

When fundraising effort came up short, Foster, one of Ventura’s most prominent and philanthropic citizens, made up the difference. Shortly after E.P. Foster died in 1932, the hospital was renamed in his honor. The Foster legacy at the hospital continued with E.P. Foster’s eldest daughter Orpha Foster serving as president of the Board of Directors from 1935 to 1960. (McCormick, 2008: 4-5)

By the late 1920s and into the 1930s, little development had occurred in Ventura east of Seaward Avenue. The new, three and four-story hospital building was constructed on the eastern fringe of the city, in an area which

was predominantly citrus and walnut orchards. The land selected for the hospital was a portion of a speculative subdivision, the Helene Park Tract, on land owned by Milan and Helen Wright. Recorded in 1929, the subdivision divided the triangle of land bounded by E. Main Street, Loma Vista (Foothill) Road and Joanne Avenue into city lots. The Wrights retained a parcel at the intersection of E. Main Street and Foothill Road, where their home was located.

The hospital purchased a block of undeveloped parcels within the tract along Loma Vista (Foothill) Road for the construction of the hospital building. The remaining parcels of the subdivision began to fill in with small single family residences starting during the mid-1940s, although as the hospital began to dominate the area, many would be converted to doctor's offices and other medical uses.

The pace of commercial construction on the parcels oriented towards Main Street was set with the opening of the massive Sears Roebuck building at 2750 E. Main Street in 1948. Nearby commercial parcels along Main Street were developed over the next ten years, particularly as residential development rapidly pressed further east during the 1950s.

A one-story wing was added to the eastern side of the hospital in 1951. In 1962 the hospital's name was changed to Community Memorial Hospital, partly on the recommendation of Orpha Foster. The original hospital building was replaced by the present eight-story building during the early 1970s. With the continued expansion of the hospital, additional residences in the immediate neighborhood were converted to medical offices, or were demolished to make way for medical buildings

Kenneth Hess, Architect

Two buildings in the study area (145 N. Brent Street and 2815 E. Main Street) were designed by Ventura architect Kenneth H. Hess. The architect's personal background and career are only partially documented. Hess was born in Missouri in 1907. When he moved to California and where he obtained his professional education are currently unknown. By 1930 he was living with his parents in Los Angeles and was employed as a draftsman. He was married around 1936, to Eleanor (family name unknown). He appears to have remained in Los Angeles until the late 1940s, when he moved his practice to Ventura. His first known commission in Ventura County was an addition to a home owned by Oxnard attorney Ben Nordman, in 1949. That year he also designed an office building for Nordman's firm in Oxnard.

During the 1950s and 1960s Hess appears to have operated a productive architectural practice, designing a large number of commercial buildings, housing projects, and a great many schools. The latter in particular appears to have become a specialty of his practice. Among his more prominent known projects in the county are the Title Insurance and Trust Company office in Ventura (1952), the City-County Justice Building in Oxnard (1955), Colonia Village in Oxnard (1957-58), Oxnard High School (1958-59), and the John C. Fremont Junior High School in Oxnard (1959-60), as well as a number of grade schools in Oxnard between 1959 and 1965. In 1957 Hess was the architect in charge of the restoration of Mission San Buenaventura. He designed the first unit of the Westview Housing Project in Ventura in 1952, and the Ventura Yacht Club building in 1967. Hess is also known to have designed a large number of schools for the Valley Oaks School District in Thousand Oaks between 1959 and 1973.

Over the course of his career Hess experimented with modern approaches to design and construction, as did many architects of the period. For the Oxnard High School project, he designed a lunch room building which was claimed at the time to be the first building on the West Coast with a roof constructed entirely of reinforced concrete. In 1961 he suggested the construction of portable prefabricated buildings to the Valley Oaks

School District to address their acute classroom shortages, possibly a novel or innovative solution at the time. It is presently unclear if any were actually constructed, however. Around 1960 Hess added architect Rudolf Zegarac as a partner or associate, and in 1964 he became the founding president of the Ventura County chapter of the AIA. Kenneth Hess died in 1977.

4. Potential Historic Resources

75 N. Brent Street. This one and two story single family residence is characterized by an irregular plan and intersecting low and medium-pitched shed roofs with medium open eaves and exposed rafters. The building is clad in wide horizontal ship-lap siding. Windows are wood frame sash and fixed units. An attached one-car garage is located to the rear (southern elevation). This residence was constructed in 1947 for Merrill E. Russell, a chiropractor, and his wife Irene. During the 1950s it was occupied by Roy Lyall, an electronics technician and his wife Irene, a dental assistant. By the 1970s it was used as a medical office. This modestly Modern Ranch style building appears to be unaltered. [Photo 1]

85 N. Brent Street. This one story single family residence features an essentially rectangular plan and a medium-pitched front-facing gable roof with medium lap siding under the gable end. The building is otherwise clad in stucco. The side entry, located on the northern elevation, is situated above a low stoop. Windows are anodized aluminum, apparently new units within the original window openings. This residence was constructed in 1946, apparently for Elmer L. Webb, an oil worker, and his wife Helen. They lived in this residence until at least 1960. This modestly Minimal Traditional style residence appears to be somewhat altered. [Photo 2]

95 N. Brent Street. This one story, stucco-clad single family residence features an L-plan and a side-facing medium-pitched gable roof with an intersecting front-facing medium-pitched gable roof with very shallow closed eaves. The entry is inset above a concrete stoop. Windows are wood frame sash, and anodized aluminum evidently replacing sash units within their original openings. This residence was constructed in 1946, apparently for Artie A. Robinson, a service station owner, and his wife Clemma. By the 1950s it was occupied by his station manager, Elmer Smith and his wife Dede. They remained until at least 1960. This very modestly Minimal Traditional style residence appears to be slightly altered. [Photo 3]

107 N. Brent Street. This one-story stucco clad single family residence feature an L-plan with intersecting front and side-facing medium-pitched gable roofs with very shallow closed eaves. The entry is located in the crook of the "L" facing the street intersection, above a low brick stoop. Windows are wood frame sash units. This residence was apparently constructed in 1946 for Roy A. Campbell, an oil worker. He remained until at least 1960. This modestly Minimal Traditional style residence appears to be unaltered. [Photo 4]

145 N. Brent Street. This two-story medical office building features a rectangular plan and a flat roof behind a featureless parapet. The main eastern elevation features eight, shallow two-story bays of arched window openings with aluminum window mullions spaced regularly along the facade, with the entry located in the center bay. A similar treatment is seen along the southern elevation. This building, known as the Cabrillo Medical Building, was designed in 1966 and completed in 1967 in a Modern interpretation of the Spanish Revival style. The developer was a partnership known as the Ventura Land and Development Company.

The architect for this building was Kenneth H. Hess of Ventura. A number of other architects are referenced on building permits, including Hummel, Rasmussen and Love of Ventura; and S.U.A of Beverly Hills, who were probably responsible for tenant improvements only. According to the original building plans, the lettering

“Cabrillo” seen on the upper facade was designed by an Ojai graphic artist named James Kuche. No further information was located on this individual. This building appears to be unaltered. [Photo 5]

2825 Cabrillo Drive. This two-story medical office building is rectangular in plan and features a flat roof behind a parapet. The roofline projects beyond the eastern elevation to cover a stairway to the second floor and a second floor balcony, supported by large rectangular columns. An under-building garage entrance is the dominant architectural feature of the southern street elevation. The first story of the building is poured-in-place concrete. The second story is vertically board-formed poured-in-place concrete. The date of construction of this building was difficult to determine from the building permits. The most likely year is 1973. This building appears to be unaltered. [Photo 6]

2841 Cabrillo Drive. This one-story medical office building is rectangular in plan and features a flat roof. The exterior cladding appears to be a composite wood or plywood material scored to resemble vertical planks. A wide cornice fascia decorated with raised panels runs the entire length of the main southern elevation. Windows are fixed aluminum units surrounded by thin wood casings. The date of construction of this building was difficult to establish from the building permits. It appears to be the combination of three buildings constructed in 1968, 1970 and 1972, altered to its current appearance in 1991. The architect, if any, is unknown. [Photo 7]

2856 Cabrillo Drive. This two-story medical office building features an irregular plan and a flat roof. Its dominant architectural features are the angular southern elevation and stairway. The building is clad in narrow vertical wood siding. Windows are fixed, with narrow wood casings. This building was constructed in 1978-79, designed in the Modern style by Rasmussen and Ellinwood architects of Ventura. It appears to be unaltered. [Photo 8]

2815 E. Main Street. The southern, street elevation of this two-story commercial building features two bays of unequal size divided by a massive stepped pilaster which projects over the parapet. Identical pilasters define the corners of the main elevation. The lower ground floor facade is characterized by an entry flanked by two, smaller-scale versions of the larger pilasters, rising to mid-elevation and an anodized aluminum storefront. The upper elevation is characterized by stucco applied in a checkerboard pattern. Windows on the ground and upper facade are fixed, surrounded by wide stucco casings and topped by projecting lintels featuring dentil-like details. The cornice line reflects the design of window lintels. This building was constructed in 1959 as a single story building with rear mezzanine for McMahon Furniture, designed by Ventura architect Kenneth H. Hess.

As nearly as could be determined by the building and planning records, the building's Main Street elevation has been remodeled at least three times. The first alteration appears to have occurred in 1973 when the building was converted to Sawyer Business College, and a bar known as The Dock. This alteration resulted in the removal of most of the building's originally continuous storefront, which consisted of floor-to-ceiling plate glass windows with no bulkheads. The original upper facade, consisting of concrete blocks laid in a checkerboard pattern and a projecting, arched canopy was retained. An internal second story replaced the mezzanine. A proposed second alteration in 1977 was approved, but apparently not implemented. A third alteration permitted in 1986 appears to have resulted in the removal of the original projecting canopy and additional changes to the storefront to accommodate a new bar, known as The Library. The original upper facade was retained. The 1986 plans suggest additional alterations to the storefront occurring between 1973 and 1986, which are not otherwise documented. All photos included in the planning files have been scanned and are illegible.

The building's current appearance evidently resulted from alterations made in 2002, for which no planning records were available, and could be dated from building permits only. However based on a review of previous planning files, this alteration covered the only major remaining feature of the original building which had survived the previous alterations (the upper facade) with the current stucco treatment, and added the second floor windows, cornice line, and projecting pilasters. The current storefront treatment also appears to date almost entirely from the 1992 alterations. [Photo 9]

Potentially Historic Properties in the Vicinity

No properties in the immediate vicinity are currently designated, listed or have been determined to be eligible for listing on the NRHP, CRHR or as city landmarks. However the Sears Roebuck building, located on the south side of E. Main Street at 2750 E. Main Street (1948) appears likely to be eligible for City Landmark designation.

5. Eligibility of Historic Resources

The eligibility of the properties in the study are summarized in a table found at the end of this section.

National and California Registers: Significance, Eligibility and Integrity

Five buildings in the study area appear to be ineligible for listing on the NRHP or CRHR due either to insufficient age or integrity. The buildings found to be ineligible on this basis are: 145 N. Brent Street, 2528 Cabrillo Drive, 2841 Cabrillo Drive, 2856 Cabrillo Drive, and 2815 E. Main Street.

The four remaining properties, residences located at 75 N. Brent Street, 85 N. Brent Street, 95 N. Brent Street and 107 N. Brent Street are generally associated with the historical theme of the development of east Ventura during the postwar era (Criterion A and 1). However, they appear to be only generally associated with this theme and are not known to have played any significant role in these events. These properties do not appear to have been associated with any historically notable individuals (Criterion B and 2). They are not representative examples of an architectural style or period or method of construction; rather they are modest examples of common types (Criterion C and 3). Criterion D and 4 pertains to archeological resources and consequently has not been evaluated in this report.

Properties Less Than 50 Years of Age

Properties less than 50 years of age may be eligible for listing on the NRHP if they can be found to be "exceptional." In terms of the CRHR, properties less than 50 years of age may be eligible if "sufficient time [has] passed to obtain a scholarly perspective on the events or individuals associated with the resource."

While no hard and fast definition for "exceptional" is provided in the NRHP literature, the special language developed to support nominating these properties was clearly intended to accommodate properties which demonstrate a level of importance such that their historical significance can be understood without the passage of time. In general, according to NRHP literature, eligible "exceptional" properties may include, "resources so fragile that survivors of any age are unusual. [Exceptionalness] may be a function of the relative age of a community and its perceptions of old and new. It may be represented by a building or structure whose developmental or design value is quickly recognized as historically significant by the architectural or engineering profession [or] it may be reflected in a range of resources for which the community has an unusually strong associative attachment." No parallel guidance language has been created for establishing the eligibility of properties less than 50 years old for listing on the CRHR, but the stated principle is generally

similar to the NRHP. No evidence was found to suggest that any property in the study area which is currently less than 50 years of age should be regarded to be of exceptional significance.

Local Significance and Eligibility

No properties appear to be associated with significant (a) events, or (c) reflect or exemplify a particular period of history. None appear to be associated with (b) the lives of significant persons or (d) embody the distinctive characteristics of a type, period or method of construction, or (e) represent the work of a master builder, designer, artist or architect.

Of the two properties in the study area which were designed by architect Kenneth Hess, one (2815 E. Main Street) has been altered to the extent that it should not currently be regarded as an example of his work or as an example of an architectural style. The other building in the study area designed by Hess (the Cabrillo Medical Building at 145 N. Brent Street) appears to be unaltered. It is generally representative of the period of late Modernism which blended Period Revival and neoclassical forms with the International Style, a combination which is generally classified as New Formalism. This brand of Modernism became popular in Southern California during the early 1960s and remained in common use for at least 20 years thereafter. Given that much if not all of the examples of this architectural style occur in relatively recent decades, and its frequency and distribution in Ventura has not been studied, the comparative basis required to establish any one example as exemplifying the style does not presently exist. Although Kenneth Hess was clearly a prolific designer, a number of architects working in Ventura County during the 1950s through the 1970s operated similarly busy practices during these decades. No evidence was found to suggest that Hess should currently be regarded as a master designer.

The other three properties in the study area which are less than 50 years of age should not be regarded as exemplifying architectural styles, nor do they appear to have been designed architects currently regarded as masters.

The properties do not (f) appear to represent a significant and distinguishable entity whose components may lack individual distinction (i.e., have the potential to contribute to a historic district). These properties were constructed in the Helene Park Tract, a 1929 subdivision bounded by Loma Vista Road, E. Main Street and N. Joanne Avenue. With the exception of the hospital, little or no development appears to have occurred within this tract prior to 1946. Beginning during the 1960s, a substantial number of the residences constructed in the tract during the postwar area were replaced with medical office buildings. Consequently, it appears that an insufficient number of potential contributors towards the formation of a historic district remain.

One property in the immediate vicinity of the study area, the Sears Roebuck building at 2750 E. Main Street, appears to be eligible for designation as a City Landmark for its role in the postwar development of east Ventura (criteria a and c), and as one of the most prominent examples of late Moderne style of architecture in the city (criterion d).

<i>Address</i>	<i>Building Use</i>	<i>Date</i>	<i>Eligibility</i>
75 N. Brent Street	Single Family Residence	1947	Ineligible
85 N. Brent Street	Single Family Residence	1946	Ineligible
95 N. Brent Street	Single Family Residence	1946	Ineligible

<i>Address</i>	<i>Building Use</i>	<i>Date</i>	<i>Eligibility</i>
107 N. Brent Street	Single Family Residence	1946	Ineligible
145 N. Brent Street	Medical Office Building	1967	Ineligible (insufficient age)
2825 Cabrillo Drive	Medical Office Building	c.1973	Ineligible (insufficient age)
2841 Cabrillo Drive	Medical Office Building	1968, 1970, 1972	Ineligible (insufficient age)
2856 Cabrillo Drive	Medical Office Building	1978-79	Ineligible (insufficient age)
2815 E. Main Street	Commercial Building	1959	Ineligible (altered)

6. Project Impacts

No properties which are proposed for demolition appear to be eligible for listing on the NRHP or CRHR, or for designation as City Landmarks. Therefore, the proposed project should not be regarded as resulting in direct significant adverse impacts on historic resources.

The project would occur within the setting of one eligible property, the Sears Roebuck building at 2750 E. Main Street. The project would result in the removal of the building at 2815 E. Main Street for the construction of an access road. This activity would break the continuous frontage of commercial buildings along the north side of Main Street which provides a portion of the setting for the eligible property. However the building to be demolished is located approximately 300 feet from the eligible property, and is substantially altered. Consequently, it contributes only marginally to the setting of the eligible property and its removal would not have a significant or adverse impact on the eligibility of the Sears Roebuck building.

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Photo 1. 75 N. Brent Street, northern elevation. [24 March 2009]



Photo 2. 85 N. Brent Street, northern and eastern elevations. [24 March 2009]



Photo 3. 95 N. Brent Street, eastern elevation. [24 March 2009]



Photo 4. 107 N. Brent Street, eastern elevation. [24 March 2009]



Photo 5. 145 N. Brent Street, eastern elevation. [24 March 2009]



Photo 6. 2825 Cabrillo Drive, southern and eastern elevations. [24 March 2009]



Photo 7. 2841 Cabrillo Drive, southern elevation. [24 March 2009]



Photo 8. 2856 Cabrillo Drive, western and southern elevations. [24 March 2009]



Photo 9. 2815 E. Main Street, southwestern elevation. [24 March 2009]

Appendix E

Noise Measurements and Modeling Results



C:\LARDAV\SLMUTIL\1-16-09.bin Interval Data

Meas

Site	Location	Number	Date	Time	Duration	Leq	SEL
---	"-----"	-----	"-----"	"-----"	-----		
0		0	05Mar 09	12:31:17	1200	57.7	88.5
0		0	05Mar 09	12:58:33	1200	67	97.8
0		0	05Mar 09	13:23:47	1200	55.5	86.3
0		0	05Mar 09	13:53:29	1200	64.5	95.3
0		0	05Mar 09	14:17:53	1200	58.6	89.4
0		0	05Mar 09	14:57:51	1200	69.6	100.4

Lmax	Lmin	Peak	Uwpk
84.5	45.8	108.6	108.5
93.1	51.2	114.3	113.6
73.8	48.2	87.8	104
76.8	50.3	91	104
87.3	47	103.9	105.4
89.4	53.4	99.8	112.6

C:\LARDAV\SLMUTIL\CMH.bin Interval Data

Meas	Site	Location	Number	Date	Time	Duration	Leq	SEL	Lmax	Lmin	Peak	Uwpk	L(10)
	-----	-----	-----	-----	-----	-----	-----	-----	-----				
	0		0	26Jul 10	12:56:53	1200	64.7	92.5	77.2	46.5	91.9	111.5	
	0		0	26Jul 10	13:20:32	1200	67	93.8	77.2	47.3	96.2	105.5	
	0		0	26Jul 10	13:46:50	1200	65.4	99.3	98.4	49.5	108.4	114.6	
	0		0	26Jul 10	14:13:09	1200	62	89.8	74.1	45.1	84.8	107.7	
	0		0	26Jul 10	14:39:09	1200	65.9	93.7	82.2	48.9	92.1	104.1	

ExistingLVbtwMain&Mills
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

ExistingLVbtwMain&Mills

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1400.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	29.2
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	29.2
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

ExistingLVbtwMain&Mills

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	65.6

ExistingMainbtwSeaward&LV
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

ExistingMainbtwSeaward&LV

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1966.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	40.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	40.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

ExistingMainbtwSeaward&LV

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	67.1

ExistingMillsbtwLV&Telegraph
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

ExistingMillsbtwLV&Telegraph

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	970.7
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	20.2
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	20.2
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

ExistingMillsbtwLV&Telegraph

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	64.0

ExistingSeawardbtwMain&Thompson
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

ExistingSeawardbtwMain&Thompson

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1104.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	23.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	23.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

ExistingSeawardbtwMain&Thompson

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	64.6

ExistingTelegraphbtwMain&Mills
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

ExistingTelegraphbtwMain&Mills

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1380.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	28.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	28.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

ExistingTelegraphbtwMain&Mills

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	65.5

2025LVbtwMain&Mills
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

2025LVbtwMain&Mills

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1588.8
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	33.1
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	33.1
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

2025LVbtwMain&Mills

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	66.2

2025MainbtwSeaward&LV
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

2025MainbtwSeaward&LV

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	2006.4
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	41.8
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	41.8
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

2025MainbtwSeaward&LV

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	67.2

2025MillsbtwLV&Telegraph
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

2025MillsbtwLV&Telegraph

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	926.4
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	19.3
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	19.3
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

2025MillsbtwLV&Telegraph

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	63.8

2025SeawardbtwMain&Thompson
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

2025SeawardbtwMain&Thompson

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1200.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	25.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	25.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

2025MainbtwSeaward&LV

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	65.0

2025TelegraphbtwMain&Mills
* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

2025TelegraphbtwMain&Mills

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	1584.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	33.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	33.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

2025TelegraphbtwMain&Mills

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	66.2



Appendix F

Traffic Results

July 8, 2010

Sandy E. Smith
SESPE Consulting, Inc.
468 Poli Street, 2E
Ventura, CA93001

Dear Mr. Smith,

In our experience, estimation of vehicle trip generation and parking demand for hospital land uses based on the number of beds in the hospital is standard operating procedure, and the most commonly used approach among professional transportation engineers and planners. For example, in the City of San Buenaventura and many other cities (including, for example, Raleigh, NC; Tampa, FL; Arlington, MA; and Glenville, NY), requirements for provision of off-street parking spaces for hospital land uses have long been based on the number of hospital beds.

Estimation of hospital vehicle trip generation per bed is more predictive of traffic impacts than a per-square-foot or per-employee basis in part due to recent changes in hospital care. For example, the hospital industry is increasingly providing only private rooms, which require more square feet per bed, in order to limit the spread of infections. Moving patients into larger rooms with more privacy, however, does not increase travel demand to and from the hospital. Similarly, the increasing volume of medical equipment used per patient frequently increases the floor area required to serve each patient, without significantly increasing travel demand.

It is our professional opinion that estimation of both vehicle trip generation and parking demand per hospital bed is the most appropriate method for use in analysis of traffic impacts of the Ventura Community Memorial Hospital Project. If you have any questions about this letter, please do not hesitate to contact me at (415) 284-1544.

Sincerely,



Patrick Siegman, Principal

PARKING

Parking in the Project area includes on-street spaces as well as off-street spaces in private and public parking lots. The public parking lots are on City-owned parcels and are part of Parking District #3. The number of existing off-street spaces on the CMH property exceeds the City's requirements for the existing hospital. Phase I includes the construction of a new hospital along with modification of a public Parking District #3 lot to provide a new street configuration that wraps around a public plaza and orients the main hospital entrance towards Main Street away from the residential areas. The number of District #3 spaces displaced in Phase I will be replaced by increasing the public spaces in the existing parking garage and a corresponding reduction in the number of private CMH spaces. The number of spaces on the CMH property with the construction of the new hospital would still exceed the City's requirements. The extra spaces may allow a portion of the building area in the old hospital building to be reused for medical use. Transportation Demand Management measures may allow some additional reuse of the existing hospital building. However, the parking provided will not be adequate to allow reuse of all of the remaining building square footage in the old hospital.

Phase II includes the build-out of the remainder of the Project Area including the liner buildings along Loma Vista Road and Brent Street, construction of the second parking garage and reconstruction of the existing parking spaces adjacent to the existing parking garage to transform it to an open space area. The parking spaces available in two garages may not be adequate to accommodate the build-out of the CMH Hospital District as proposed.

The parking management strategy for the Hospital District incorporates the following components:

- Establish a requirement of one parking space per 1500 square feet of residential land uses in the Hospital District Development Code;
- Amendment of the Municipal Code to allow permit parking in residential neighborhoods surrounding the Hospital District that are impacted by the hospital operations;
- Any loss of District #3 spaces to be replaced with corresponding increases on City-owned property;
- Implementation of two-hour time restrictions on all public parking within and around the Hospital District including on-street parking spaces as an interim measure;
- Establishment of a price for leasing of some of the District #3 spaces based on prices similar to the existing parking structure in the Downtown

as an interim measure until paid parking is implemented in the Project Area;

- Reuse of the existing hospital building and new buildings proposed on CHM property would be subject to providing additional parking on-site or within 1,250 feet of the hospital. Off-site parking located further than 1,250 feet may be allowed subject to approval by the Community Development Director. Additional parking on-site may be provided with the establishment of a TDM program for CMH employees. Details of the specifics of the TDM program along with the anticipated reductions in parking will need to be reviewed and approved by the Community Development Director.

CMH HOSPITAL DISTRICT PARKING STRATEGY

Uses:

- Hospital with 252 beds
- Reuse of the remaining area of 103,836 square feet in the existing hospital building (225,299 - 121, 463 (support)) = 103,836 square feet
- New buildings possibly with residential units

Parking Regulations:

- Medical Care – two spaces per bed
- Medical Consulting – One space for each 300 square feet of gross floor area
- Residential Use – establish parking requirement of 1 parking space per 1,500 square feet

Required Parking:

- $252 \times 2 = 504$ spaces for hospital
- $103,836/300 = 346$ spaces for reuse of existing hospital
- parking for new buildings with residential units

Parking Available:

(numbers to be verified and confirmed at a later date)

- 119 district spaces on Lot 1.
- 385? Spaces on Lot 2
- 39 spaces on Lot 3
- 27 spaces on Lot 4
- 16 spaces around park (assumed to be District parking)
- 34 spaces east of Glen
- credit for excess parking from the 289? spaces at 168 Brent Street beyond the 229 spaces required for 68,659 square feet of building area = 60 spaces

Parking provided on Lots 1, 2, 3 & 4 = 570 spaces

District spaces to be replaced include a total of 85 spaces with 8 spaces in Lot 21, 23 spaces in Lot 20 and 54 spaces in Lot 19.

CMH to address the reduction of private parking spaces adjacent to Lot 20.

Regain the 85 District spaces by reducing the CMH spaces in the existing garage.

Extra parking spaces = $(570 - 85 + 34 + 60) - 504 = 75$ spaces

Extra parking of 75 spaces translates to 22,500 square feet of the existing Hospital building that can be reused.

Reuse of the existing hospital building and new buildings with residential units subject to providing additional parking on-site or within 1,250 feet of the hospital. Off-site parking located further than 1,250 feet may be allowed subject to approval by the Community Development Director. Any existing parking spaces that may be lost need to be replaced along with the required parking for the new use. Additional parking on-site may be provided with the establishment of a TDM program for CMH employees. Details of the specifics of the TDM program along with the anticipated reductions in parking will need to be reviewed and approved by the Community Development Director.

Parking Management:

- Amend the Municipal Code to allow permit parking in residential neighborhoods surrounding the Hospital District that are impacted by the hospital operations
- Implement two-hour time restrictions on all public parking within and around the Hospital District including on-street parking spaces.
- Allow parking district spaces to be leased out based on prices similar to the existing parking structure in the Downtown.

City of Ventura, ADT Monitoring Results

Roadway	Segment	Average Daily Traffic			
		Year 2000	Year 2002	Year 2004	Year 2007
Main Street	west of Seaward Avenue	20,648	20,201	18,914	15,627
Main Street	Between Seaward Avenue and Loma Vista Road	21,295	19,751	18,842	20,479
Main Street	Between Loma Vista Road and Telegraph Road	17,150	16,567	16,443	25,887
Main Street	east of Telegraph Road	23,850	28,945	26,992	27,734
Main Street	west of Mills Road	27,998	24,987	27,997	27,576
Main Street	east of Mills Road	46,034	48,100	47,005	46,637
Loma Vista Road	Between Main Street and Hillmont Avenue	11,078	10,085	10,691	17,812
Loma Vista Road	west of Mills Road	17,045	15,205	15,253	11,367
Loma Vista Road	Between Mills Road and Ashwood Avenue	11,739	9,697	10,832	9,108
Loma Vista Road	east of Ashwood Avenue	11,163	9,411	8,704	5,006
Telegraph Road	east of Main Street	16,051	15,394	15,899	13,099
Telegraph Road	west of Mills Road	18,116	18,317	18,123	15,668
Telegraph Road	Between Mills Road and Ashwood Avenue	21,781	22,321	16,328	19,340
Telegraph Road	east of Ashwood Avenue	23,807	22,331	20,422	20,492
Foothill Road	Between Seaward Avenue and Hillmont Avenue	Not Available	Not Available	8,501	9,023
Foothill Road	east of Hillmont Avenue	8,407	9,180	9,002	9,416
Mills Road	Bewteen Loma Vista Road and Telegraph Road	10,014	10,764	10,025	10,110
Mills Road	south of Telegraph Road	21,115	22,944	21,605	21,068
Mills Road	north of Main Street	32,701	33,706	35,197	35,310

LAND USE AND TRIP GENERATION COMPARISON
- GENERAL PLAN VERSUS LAND USE ALTERNATIVE (TAZ 179)

Land Use Category	Units	General Plan		LU Alternative		Difference	
		Amount	ADT	Amount	ADT	Amount	ADT
1. Single Family Detached	DU	84	804	84	804	0	0
2. Condos	DU	48	281	48	281	0	0
3. Apartments	DU	106	703	106	703	0	0
8. Medium Retail	TSF	134.74	7,133	138.64	7,340	3.90	207
10. Office	TSF	57.52	633	57.52	633	0	0
11. Government Office	TSF	203.21	5,080	203.21	5,080	0	0
15. High School	STU	600	1,074	600	1,074	0	0
22. Hospital	BED	240	2,825	252	2,966	12.00	141
23. Church	TSF	7.48	68	7.48	68	0	0
30. Medical Office	TSF	--	--	267	9,647	267	9,647
Sub-total			18,601		28,596	0	9,995

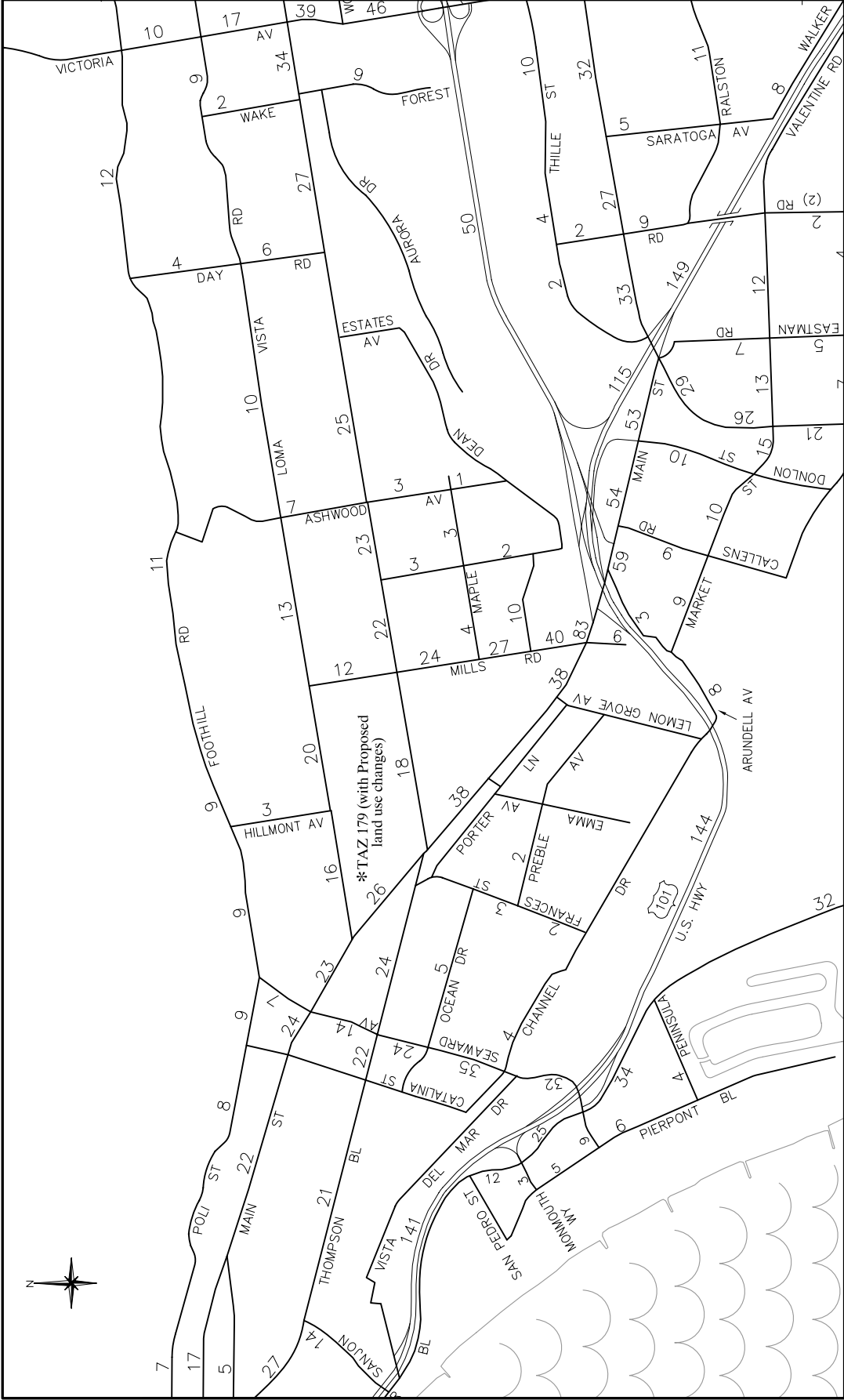
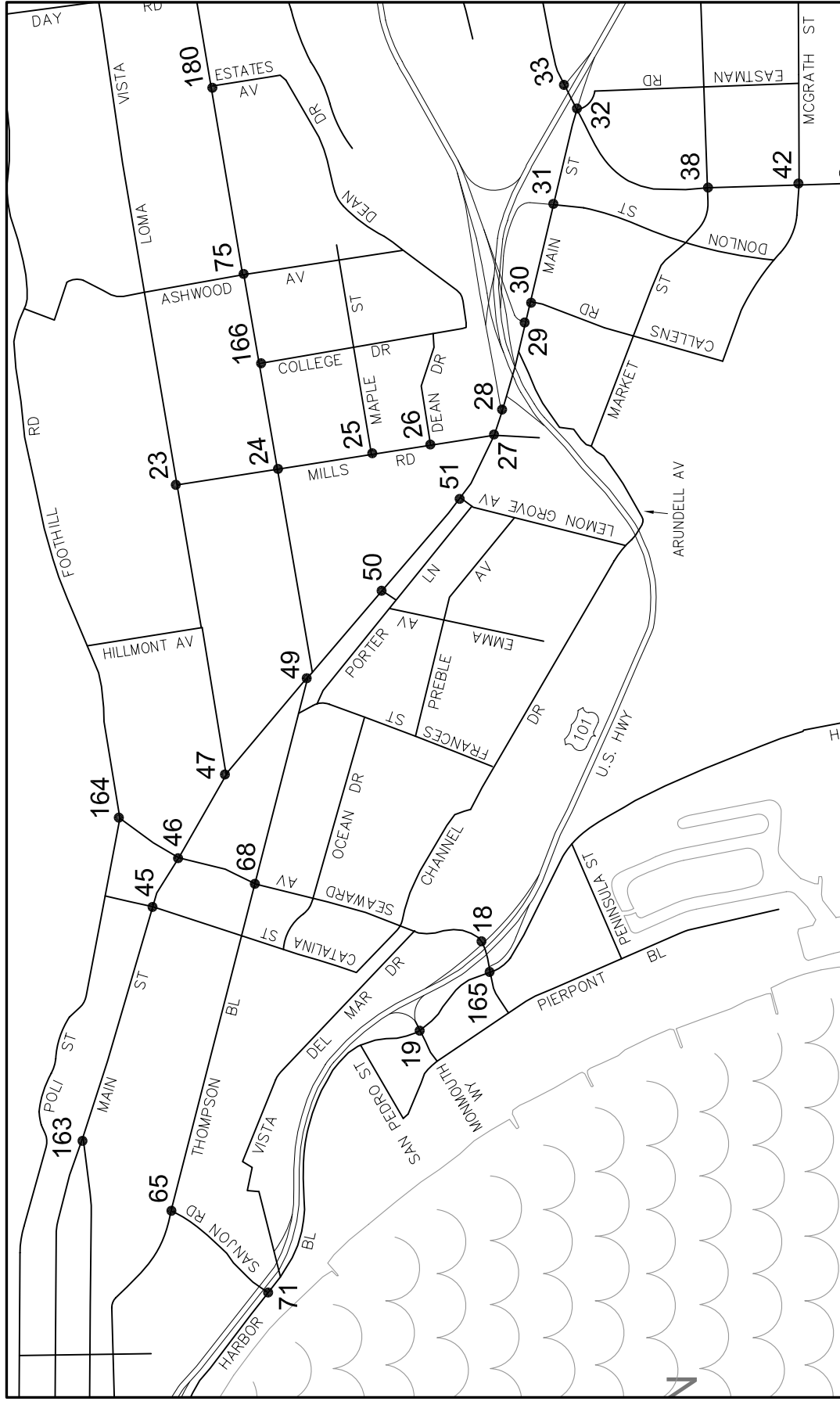


Figure 1

2025 ADT VOLUMES (000's)
- WITH PROPOSED LAND USE CHANGES (TAZ 179)

Legend

XX With Proposed Land Use Changes



Legend

XX ●

Intersection Location

Figure 2

INTERSECTION LOCATION MAP

18. Seaward & US 101 NB Ramps

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3200	510	.16*	570	.18*
NBT	2	3200	960	.30	960	.30
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3200	750	.23*	1080	.34*
SBR	1	1600	230	.14	260	.16
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	2	3200	390	.12*	370	.12*
WBT	0	0	0		0	
WBR	2	3200	420	.13	450	.14
TOTAL CAPACITY UTILIZATION				.51		.64

19. Monmouth/US 101 SB & Harbor

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0.5		20		30	
NBT	1.5	3200	30	.03*	40	.03*
NBR	0		40		40	
SBL	1.5		650		960	
SBT	0.5	3200	40	.22*	70	.33*
SBR	0		10		40	
EBL	1	1600	150	.09*	150	.09*
EBT	2	3200	350	.12	410	.14
EBR	0	0	20		30	
WBL	1	1600	20	.01	30	.02
WBT	1	1600	380	.24*	570	.36*
WBR	1	1600	310	.19	330	.21
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION				.58		.81

23. Mills & Loma Vista

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		380	{.14}*	280	{.09}*
NBT	0.5	3200	70	.14	20	.09
NBR	1	1600	30	.02	50	.03
SBL	1	1600	40	.03	20	.01
SBT	1	1600	40	.04*	20	.03*
SBR	0	0	20		20	
EBL	1	1600	20	.01*	10	.01
EBT	2	3200	330	.10	740	.23*
EBR	d	1600	310	.19	530	.33
WBL	1	1600	70	.04	60	.04*
WBT	2	3200	480	.15*	380	.12
WBR	d	1600	60	.04	20	.01
Right Turn Adjustment					EBR	.03*
TOTAL CAPACITY UTILIZATION				.34		.42

24. Mills & Telegraph

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	280	.18*	170	.11*
NBT	1	1600	420	.26	240	.15
NBR	1	1600	190	.12	340	.21
SBL	1	1600	60	.04	140	.09
SBT	2	3200	370	.12*	480	.15*
SBR	1	1600	10	.01	20	.01
EBL	1	1600	30	.02*	20	.01
EBT	2	3200	370	.12	660	.21*
EBR	1	1600	80	.05	210	.13
WBL	2	3200	250	.08	220	.07*
WBT	2	3200	480	.18*	480	.17
WBR	0	0	80		70	
TOTAL CAPACITY UTILIZATION				.50		.54

25. Mills & Maple

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	20	.01	80	.05*
NBT	2	3200	1050	.36*	790	.28
NBR	0	0	90		120	
SBL	1	1600	60	.04*	110	.07
SBT	2	3200	710	.24	990	.33*
SBR	0	0	50		60	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	220		230	
WBT	1	1600	20	.15*	20	.16*
WBR	1	1600	40	.03	30	.02
TOTAL CAPACITY UTILIZATION				.55	.54	

26. Mills & Dean

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	40	.03	180	.11*
NBT	2	3200	1270	.40*	910	.28
NBR	1	1600	280	.18	360	.23
SBL	1	1600	30	.02*	50	.03
SBT	2	3200	800	.26	1050	.34*
SBR	0	0	20		30	
EBL	1	1600	20	.01	40	.03
EBT	1	1600	20	.01*	30	.02*
EBR	1	1600	20	.01	190	.12
WBL	2	3200	400	.13*	250	.08*
WBT	1	1600	50	.05	50	.06
WBR	0	0	30		40	
Right Turn Adjustment					EBR	.02*
TOTAL CAPACITY UTILIZATION				.56	.57	

27. Mills & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	30		30	
NBT	1	1600	70	.06*	80	.07*
NBR	1	1600	340	.21	230	.14
SBL	2.5		1190		1400	
SBT	0.5	4800	80	.27*	90	.31*
SBR	0		40		20	
EBL	2	3200	100	.03*	100	.03*
EBT	4	6400	1080	.17	1310	.20
EBR	1	1600	20	.01	30	.02
WBL	2	3200	170	.05	360	.11
WBT	3	4800	1280	.27*	1570	.33*
WBR	2	3200	1480	.46	1400	.44
Right Turn Adjustment			NBR	.05*		
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION				.68	.74	

28. US 101 NB Ramps & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3200	550	.17*	320	.10*
SBT	0	0	0		0	
SBR	3	4800	1880	.39	1470	.31
EBL	0	0	0		0	
EBT	3	4800	2280	.48*	2810	.59*
EBR	f		320		160	
WBL	2	3200	380	.12*	540	.17*
WBT	3	4800	1070	.22	1850	.39
WBR	0	0	0		0	
TOTAL CAPACITY UTILIZATION				.77	.86	

29. SR 126 EB Ramps & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	2	3200	270	.08	480	.15*
EBT	3	4800	2540	.53*	2930	.61
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	3	4800	1260	.26	2440	.51*
WBR	f		130		310	
TOTAL CAPACITY UTILIZATION				.53		.66

30. Callens & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		180	{.06}*	630	{.20}*
NBT	0.5	3200	10	.06	10	.20
NBR	1	1600	40	.03	110	.07
SBL	0	0	10		10	
SBT	1	1600	10	.02*	10	.02*
SBR	0	0	10		10	
EBL	1	1600	10	.01	20	.01
EBT	4	6400	2230	.35*	2640	.41*
EBR	d	1600	310	.19	260	.16
WBL	2	3200	90	.03*	180	.06*
WBT	3	4800	1210	.25	2100	.44
WBR	0	0	10		10	
TOTAL CAPACITY UTILIZATION				.46		.69

31. Donlon & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		160		600	
NBT	0	3200	0	.06*	0	.24*
NBR	0.5		30		160	
SBL	1.5		360		330	
SBT	0.5	3200	140	.16*	90	.13*
SBR	1	1600	180	.11	210	.13
EBL	0	0	0		0	
EBT	4	6400	1950	.30*	2620	.41*
EBR	d	1600	190	.12	190	.12
WBL	2	3200	110	.03*	240	.08*
WBT	3	4800	1070	.22	1620	.34
WBR	0	0	0		0	
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION				.55		.86

32. Telephone & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3200	260	.08	700	.22
NBT	2	3200	240	.08*	1010	.32*
NBR	1	1600	80	.05	280	.18
SBL	1.5		250	.16	460	
SBT	1.5	4800	960	.30*	680	.24*
SBR	f		750		990	
EBL	2	3200	460	.14	760	.24
EBT	3	4800	1090	.23*	1580	.33*
EBR	f		380		460	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION				.61		.89

33. US 101 NB Ramps & Telephone

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1.5		660		520	
NBT	0.5	3200	30	.22*	70	.18*
NBR	1	1600	260	.16	400	.25
SBL	0.5		40		10	
SBT	0	3200	0	.12*	0	{.01}*
SBR	1.5		340		230	
EBL	1	1600	20	.01*	290	.18*
EBT	3	4800	720	.15	1860	.39
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	3	4800	990	.21*	1380	.29*
WBR	0	0	10		20	
Right Turn Adjustment					NBR	.01*
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION			.56		.67	

38. Telephone & Market

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	150	.09	220	.14
NBT	3	4800	530	.11*	870	.18*
NBR	d	1600	90	.06	90	.06
SBL	1	1600	450	.28*	160	.10*
SBT	3	4800	270	.06	680	.14
SBR	d	1600	170	.11	160	.10
EBL	1	1600	60	.04	230	.14*
EBT	1	1600	270	.17*	250	.16
EBR	1	1600	150	.09	310	.19
WBL	1	1600	50	.03*	160	.10
WBT	1	1600	130	.08	360	.23*
WBR	1	1600	120	.08	590	.37
Right Turn Adjustment					WBR	.06*
TOTAL CAPACITY UTILIZATION			.59		.71	

42. Telephone & McGrath

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	180	.11*	220	.14*
NBT	3	4800	660	.14	940	.20
NBR	d	1600	280	.18	100	.06
SBL	1	1600	60	.04	70	.04
SBT	2	3200	310	.10*	1060	.33*
SBR	1	1600	50	.03	40	.03
EBL	1	1600	20	.01	70	.04
EBT	1	1600	60	.04*	30	.02*
EBR	1	1600	130	.08	350	.22
WBL	1	1600	70	.04*	280	.18*
WBT	1	1600	30	.02	90	.06
WBR	1	1600	60	.04	160	.10
Right Turn Adjustment					EBR	.09*
TOTAL CAPACITY UTILIZATION			.29		.76	

45. Catalina & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	10	.01	20	.01
NBT	1	1600	50	.04*	10	.02*
NBR	0	0	10		20	
SBL	2	3200	240	.08*	70	.02*
SBT	1	1600	20	.04	10	.01
SBR	0	0	50		10	
EBL	0.5		20		20	{.01}*
EBT	1.5	3200	810	.26*	800	.26
EBR	0		10		10	
WBL	1	1600	10	.01*	50	.03
WBT	2	3200	510	.21	870	.31*
WBR	0	0	160		120	
TOTAL CAPACITY UTILIZATION			.39		.36	

46. Seaward & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	60	.04*	220	.14*
NBT	1	1600	160	.10	170	.11
NBR	1	1600	370	.23	280	.18
SBL	1	1600	30	.02	60	.04
SBT	1	1600	140	.09*	90	.06*
SBR	1	1600	190	.12	80	.05
EBL	1	1600	110	.07	80	.05
EBT	2	3200	730	.23*	640	.20*
EBR	1	1600	210	.13	180	.11
WBL	0.5		90		200	
WBT	1.5	3200	490	.19*	770	.33*
WBR	0		20		100	
Note: Assumes E/W Split Phasing						
TOTAL CAPACITY UTILIZATION					.55	.73

47. Main & Loma Vista

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	2	3200	290	.09*	550	.17*
NBR	f		40		200	
SBL	1	1600	570	.36*	400	.25*
SBT	2	3200	650	.21	610	.20
SBR	0	0	10		20	
EBL	0	0	10		20	
EBT	1	1600	60	.04*	60	.05*
EBR	1	1600	10	.01	40	.03
WBL	0	0	50	{.03}*	120	{.08}*
WBT	1	1600	30	.05	40	.10
WBR	2	3200	370	.12	530	.17
TOTAL CAPACITY UTILIZATION					.52	.55

49. Main & Telegraph

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1.5		290	.18	680	
NBT	1.5	4800	750	.23*	800	.31*
NBR	f		190		160	
SBL	1.5		200		340	.21
SBT	1.5	4800	470	.15*	930	.31*
SBR	0		50		60	
EBL	0	0	0		0	
EBT	2	3200	310	.10	400	.13
EBR	f		730		680	
WBL	0	0	0		0	
WBT	1.5	4800	320	.10*	530	{.17}*
WBR	1.5		140		310	
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION					.48	.79

50. Emma & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	70	.04*	30	.02*
NBT	0	0	0		0	
NBR	1	1600	80	.05	40	.03
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3200	1080	.34*	1480	.46*
EBR	1	1600	60	.04	70	.04
WBL	1	1600	50	.03*	90	.06*
WBT	3	4800	1140	.24	1720	.36
WBR	0	0	0		0	
TOTAL CAPACITY UTILIZATION					.41	.54

51. Lemon Grove & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0.5		40		40	
NBT	1.5	3200	20	.04*	20	.03*
NBR	0		90	.06	30	
SBL	1.5		30		70	
SBT	0.5	3200	10	.01*	10	.03*
SBR	1	1600	70	.04	70	.04
EBL	1	1600	40	.03	60	.04
EBT	2	3200	1090	.34*	1350	.42*
EBR	d	1600	60	.04	90	.06
WBL	1	1600	30	.02*	30	.02*
WBT	3	4800	1100	.24	1540	.33
WBR	0	0	50		50	
Note: Assumes N/S Split Phasing						
TOTAL CAPACITY UTILIZATION				.41	.50	

65. Sanjon & Thompson

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3200	500	.16*	580	.18*
NBT	0	0	0		0	
NBR	1	1600	190	.12	230	.14
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3200	500	.24*	710	.31*
EBR	0	0	280		280	
WBL	1	1600	160	.10*	160	.10*
WBT	2	3200	520	.16	790	.25
WBR	0	0	0		0	
TOTAL CAPACITY UTILIZATION				.50	.59	

68. Seaward & Thompson

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	100	.06	210	.13*
NBT	2	3200	580	.18*	540	.17
NBR	d	1600	200	.13	190	.12
SBL	1	1600	120	.08*	60	.04
SBT	2	3200	370	.12	540	.17*
SBR	d	1600	70	.04	60	.04
EBL	1	1600	100	.06	100	.06
EBT	2	3200	630	.22*	820	.29*
EBR	0	0	80		100	
WBL	2	3200	190	.06*	250	.08*
WBT	2	3200	410	.13	850	.27
WBR	1	1600	40	.03	60	.04
TOTAL CAPACITY UTILIZATION				.54	.67	

71. Sanjon & Harbor

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	1	1600	210	.13*	380	.24*
SBT	0	0	0		0	
SBR	1	1600	80	.05	130	.08
EBL	1	1600	70	.04*	120	.08*
EBT	1	1600	230	.14	470	.29
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	260	.16*	550	.34*
WBR	1	1600	470	.29	280	.18
Right Turn Adjustment			WBR	.03*		
TOTAL CAPACITY UTILIZATION				.36	.66	

75. Ashwood & Telegraph

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	40	.03	40	.03
NBT	1	1600	50	.03*	100	.06*
NBR	d	1600	40	.03	60	.04
SBL	1	1600	60	.04*	170	.11*
SBT	1	1600	50	.03	70	.04
SBR	1	1600	120	.08	120	.08
EBL	1	1600	80	.05*	160	.10
EBT	2	3200	520	.16	910	.28*
EBR	d	1600	20	.01	60	.04
WBL	1	1600	40	.03	60	.04*
WBT	2	3200	590	.18*	610	.19
WBR	d	1600	100	.06	90	.06

TOTAL CAPACITY UTILIZATION .30 .49

163. Santa Clara & Main

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	10	{.01}*	10	{.01}*
NBT	1	1600	10	.01	10	.01
NBR	2	3200	260	.08	230	.07
SBL	0	0	50		30	
SBT	1	1600	10	.04*	10	.03*
SBR	0	0	10		10	
EBL	1	1600	10	.01	10	.01
EBT	2	3200	350	.11*	480	.15*
EBR	0	0	10		10	
WBL	1	1600	140	.09*	180	.11*
WBT	2	3200	370	.13	550	.18
WBR	0	0	30		30	

TOTAL CAPACITY UTILIZATION .25 .30

164. Seaward & Poli

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	0	0	160		190	
NBT	1	1600	0	.18*	0	.23*
NBR	0	0	130		170	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	1	1600	150	.09*	360	.23*
EBR	d	1600	80	.05	140	.09
WBL	1	1600	230	.14*	110	.07*
WBT	1	1600	170	.11	290	.18
WBR	0	0	0		0	

TOTAL CAPACITY UTILIZATION .41 .53

165. Seaward & Harbor

2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR		PM PK HOUR	
			VOL	V/C	VOL	V/C
NBL	1	1600	40	.03	80	.05
NBT	2	3200	360	.13*	310	.12*
NBR	0	0	40		60	
SBL	2	3200	570	.18*	670	.21*
SBT	2	3200	200	.06	330	.10
SBR	1	1600	310	.19	480	.30
EBL	2	3200	450	.14*	370	.12
EBT	2	3200	550	.18	1120	.37*
EBR	0	0	20		50	
WBL	1	1600	10	.01	30	.02*
WBT	2	3200	270	.08*	450	.14
WBR	2	3200	910	.28	1180	.37
Right Turn Adjustment			WBR	.06*		

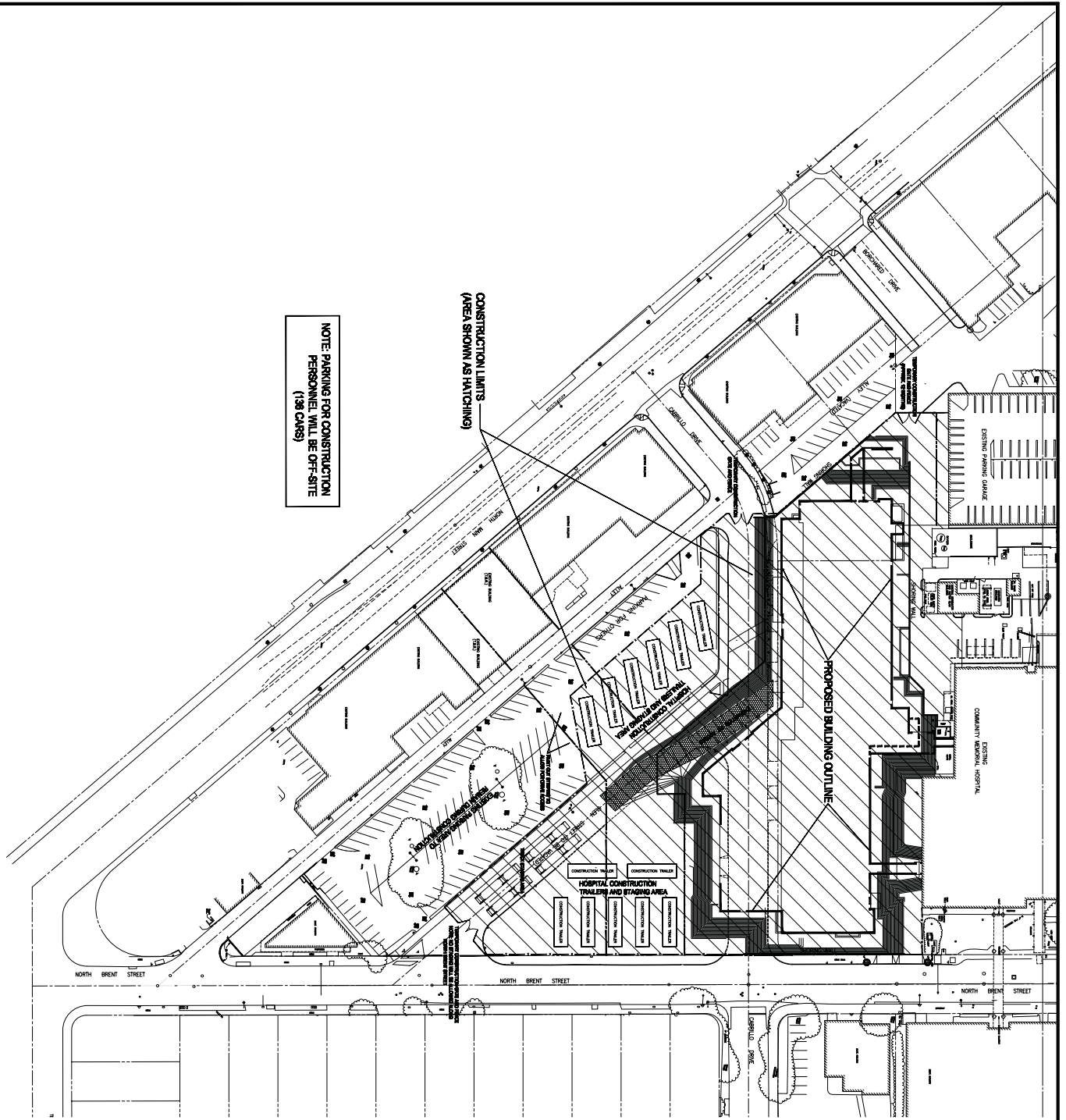
TOTAL CAPACITY UTILIZATION .59 .72

166. College & Telegraph

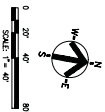
2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	0	0	40		20	
NBT	1	1600	0	.06*	0	.07*
NBR	0	0	60		90	
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3200	580	.20*	980	.33*
EBR	0	0	70		80	
WBL	1	1600	120	.08*	50	.03*
WBT	2	3200	730	.23	700	.22
WBR	0	0	0		0	
TOTAL CAPACITY UTILIZATION				.34		.43

180. Estates & Telegraph

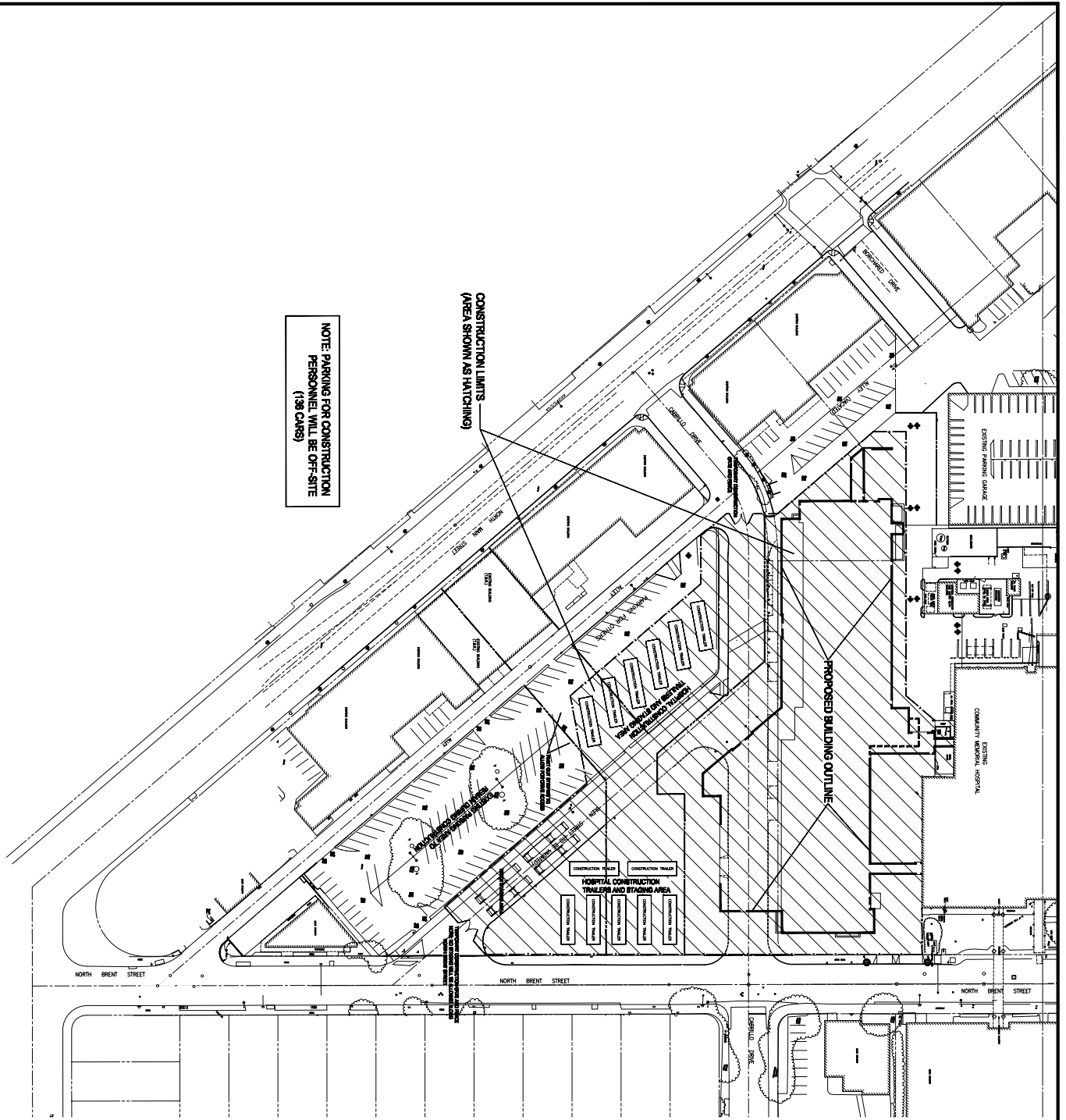
2025 with LU Changes						
	LANES	CAPACITY	AM PK HOUR VOL	V/C	PM PK HOUR VOL	V/C
NBL	1	1600	90	.06*	50	.03
NBT	1	1600	10	.05	10	.06*
NBR	0	0	70		90	
SBL	0	0	10		10	{.01}*
SBT	1	1600	10	.02*	10	.02
SBR	0	0	10		10	
EBL	1	1600	10	.01*	10	.01
EBT	2	3200	540	.17	880	.28*
EBR	d	1600	60	.04	70	.04
WBL	1	1600	30	.02	90	.06*
WBT	2	3200	660	.21*	800	.25
WBR	d	1600	20	.01	10	.01
TOTAL CAPACITY UTILIZATION				.30		.41



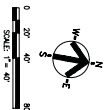
Hospital Site Staging Plan - Phase 1



<p>Sheet No. 1 of 1</p> <p>C-1</p> <p>Project: Hospital Site Staging Plan - Phase 1</p>		<p>Hospital Designers, Inc. Frederick S. Scott, Architect</p> <p>11330 Olive Boulevard, St. Louis, Missouri 63141 (314) 587-9000</p>	<p>Construction By Hospital Building & Equipment Company</p> <p>A Division of HBE Corporation, 11330 Olive Boulevard, St. Louis, Missouri 63141, Phone (314) 587-9000</p>	<p>A New 8½ Story Hospital with Basement for COMMUNITY MEMORIAL HOSPITAL of SAN BUENAVENTURA Ventura, California</p> <p>INCREMENT #2 OSHPD #S-082255-56</p>
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Hospital Site Staging Plan - Phase 1A



<p>Sheet No. C-2</p> <p>Project No. 13-0000</p> <p>Revision No. 1</p> <p>Scale: 1" = 40'</p>		<p>Hospital Designers, Inc. Frederick S. Scott, Architect</p> <p>11330 Olive Boulevard, St. Louis, Missouri 63141 (314) 587-9000</p>	<p>Construction By Hospital Building & Equipment Company</p> <p>A Division of HBE Corporation, 11330 Olive Boulevard, St. Louis, Missouri 63141, Phone (314) 587-9000</p>	<p>A New 8½ Story Hospital with Basement for COMMUNITY MEMORIAL HOSPITAL of SAN BUENAVENTURA Ventura, California</p> <p>INCREMENT #2 OSHPD #IS-082255-56</p>
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RESOLUTION 88- 43

A RESOLUTION OF THE CITY COUNCIL APPROVING AND
ADOPTING A TRAFFIC CIRCULATION IMPROVEMENT PLAN

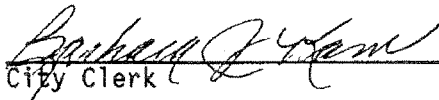
BE IT RESOLVED by the City Council of the City of San Buenaventura as follows:

SECTION 1: City administration has presented a proposed updated Traffic Circulation Improvement Plan to implement traffic mitigation measures within the City and to serve as the Traffic Circulation Improvement Plan contemplated by Article 1 of Chapter 9 of Division 1 (sections 1900 et seq.) of the City of San Buenaventura Ordinance Code ("Traffic Mitigation Fee Ordinance"), in particular section 1902.5 thereof.

SECTION 2: The City Council hereby approves and adopts as the Traffic Circulation Improvement Plan contemplated by City's "Traffic Mitigation Fee Ordinance" those anticipated future street improvements, and the estimated costs relating thereto, listed on Exhibit "A" attached hereto and incorporated herein by this reference. This Plan shall be utilized for purposes of establishing traffic mitigation fees payable pursuant to said Ordinance until such time as amendments may be made to the plan based upon further or more refined data or for other reasons.

PASSED AND ADOPTED this 9th day of May, 1988.

BM/lm/265


City Clerk

TRAFFIC CIRCULATION IMPROVEMENT PLAN

Exhibit "A"

CATEGORY	PROJECT	LOCATION	PROJECT COST	PROJECT DESCRIPTION
EXTENSIONS	1. KIMBALL ROAD	North Bank to Telephone	\$ 3,850,000	Add 4-lane street
	2. KIMBALL ROAD	Foothill to Telegraph	804,000	Align Kimball/Telegraph intersection and widen to 4 lanes CONSTRUCTED
	3. KIMBALL ROAD	North Bank to Oxnard	12,280,000	Construct 2 lane bridge across Santa Clara River
	4. NORTH BANK DRIVE	Johnson to Kimball	2,850,000	Add 4-lane street
	5. JOHNSON DRIVE	Thille to Telegraph	4,025,000	Add 4-lane street with Highway 126 overcrossing with median
	6. OLIVAS PARK DRIVE	Golf Course Dr. to U.S. 101	4,650,000 *****	Add 6-lane street PARTIALLY CONSTRUCTED
			SUBTOTAL \$28,459,000	

WIDENINGS	7. WELLS ROAD	Route 126 to Telegraph	\$ 1,127,000	Widen to 4 lanes with median
	8. TELEPHONE ROAD	Cachuma to Wells	2,883,000	Widen to 4 lanes CONSTRUCTED
	9. TELEPHONE ROAD	McGrath to Olivas Park	3,292,000	Widen to 4 lanes with railroad overcrossing and median
	10. TELEGRAPH ROAD	a. Harding to Petit b. Petit to Pajaro	1,912,000 4,207,000	Widen to 4 lanes with median CONSTRUCTED Widen to 4 lanes with median PARTIALLY CONSTRUCTED
	11. HARBOR BOULEVARD	Sanjon to San Pedro	737,000	Widen to 4 lanes
	12. FOOTHILL ROAD	a. Agnus to Hamilton b. Hamilton to Victoria c. Victoria to Kimball	2,900,000 4,645,000 3,457,000	Widen to 3 lanes Widen to 3 lanes Widen to 3 lanes PARTIALLY CONSTRUCTED
	13. KIMBALL ROAD	Highway 126 to Telegraph	1,155,000	Widen to 6 lanes with median CONSTRUCTED
	14. JOHNSON DRIVE	Bristol to Swan	5,017,000 *****	Widen to 4 lanes
			SUBTOTAL \$31,332,000	

5/9/88

TRAFFIC CIRCULATION IMPROVEMENT PLAN (Cont'd)

Exhibit

CATEGORY	PROJECT	LOCATION	PROJECT COST	PROJECT DESCRIPTION	
INTERCHANGES	15. JOHNSON DRIVE	At U.S. 101	\$ 8,662,000	Reconstruct Johnson Drive/U.S. 101 including Olivas Park Drive railroad separation	PARTIALLY CONSTRUCTED
	16. SEAWARD AVENUE	At U.S. 101	3,480,000	Includes: CONSTRUCTED a. New NB on-ramp via Allesandro b. Widen Seaward Bridge to 6 lanes c. Widen Harbor to 6 lanes from Seaward to Monmouth d. Remove existing SB on-ramp	
	17. KIMBALL ROAD	At S.R. 126	4,750,000	Reconstruct Kimball Road/Hwy. 126 interchange	CONSTRUCTED
	18. VICTORIA	At U.S. 101	4,830,000 *****	Realign SB on/off ramps	CONSTRUCTED
SUBTOTAL			\$21,722,000		

INTERSECTIONS	19. VICTORIA/TELEGRAPH		\$ 285,000	Reconstruct northbound leg to provide 4 approach lanes (2L,1T+L,1T+R)	CONSTRUCTED
	20. TELEPHONE/MAIN		10,170,000	Widen Telephone to provide additional southbound through lane and construct flyover to southbound on-ramp	ALTERNATE PROJECT CONSTRUCTED
	21. VICTORIA/OLIVAS PARK		2,102,000	Widen Victoria to provide second southbound left lane and widen to 6 lanes from U.S. 101 to Olivas Park Drive.	PARTIALLY CONSTRUCTED
	22. VICTORIA/TELEPHONE		1,395,000	Widen to provide double left turn and right turn only lane on all approaches.	CONSTRUCTED
SUBTOTAL			\$13,952,300		5/9/88

TOTAL PROJECT COSTS: \$95,465,000

STATE OF CALIFORNIA)
COUNTY OF VENTURA) SS
CITY OF SAN BUENAVENTURA)

I, BARBARA J. KAM, City Clerk of the City of San Buenaventura, do hereby certify that the above and foregoing Resolution was duly passed and adopted by the City Council of said City at a regular meeting held on the 9th day of May, 1988, by the following vote:

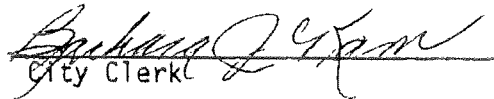
AYES: Councilmembers Sullard, Francis, Villeneuve,
Drake and McWherter.

NOES: None.

ABSENT: None.

ABSTAINED: Councilmembers Crew and Monahan.

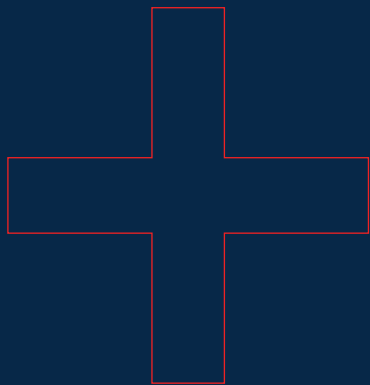
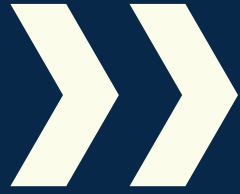
IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 10th day of May, 1988.


City Clerk



Appendix G

Development Code



Community Memorial Hospital

District Development Code

Acknowledgements

Community Memorial Hospital

Gary Wilde, President and CEO
Adam Thunell, Vice President and COO
Haady Lashkari, Assistant Vice President
John Oden, Project Manager

City Council

Bill Fulton, Mayor
Mike Tracy, Deputy Mayor
Neal Andrews
Brian Brennan
James L. Monahan
Carl E. Morehouse
Christy Weir

Administration

Rick Cole, City Manager
Ariel Pierre Calonne, City Attorney
Jeffrey Lambert, AICP, Community Development Director

Project Team

Brian Randall, Principal Planner
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Chandra Chandrashaker, Associate Transportation Engineer
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The structure, format, and content of this Development Code is based in large part on the Midtown Corridors Development Code.

I.	Vision	5
II.	Code	13
	Purpose & Design Intent	14
	Regulating Plan and zones	27
	Zones & Development Standards	35
	Overlay Zones	41
	The Public Realm	43
	Land Uses.....	61
	Frontage Type standards	65
	Building Type standards	73
	Sign Standards & Design guidelines	77
	Definitions	85

Figures and Tables

Figure 1 Regulating Plan..... 33

Figure 2 Massing Regulating Plan..... 37

Figure 3 Public RealmRegulating Plan 45

Figure 4 Street Types Plan 49

Figure 5-1 Loma Vista Road Street Section 50

Figure 5-2 Main Street Section 51

Figure 5-3 Borchard Drive Street Section 52

Figure 5-4 Brent Street Section..... 53

Figure 5a Cabrillo Drive Street Section 54

Figure 5b Cabrillo Drive Street Section..... 55

Figure 5c Cabrillo Drive Street Section 56

Figure 6 Hospital Way Street Section 57

Figure 7a Access and Parking Alley Section..... 58

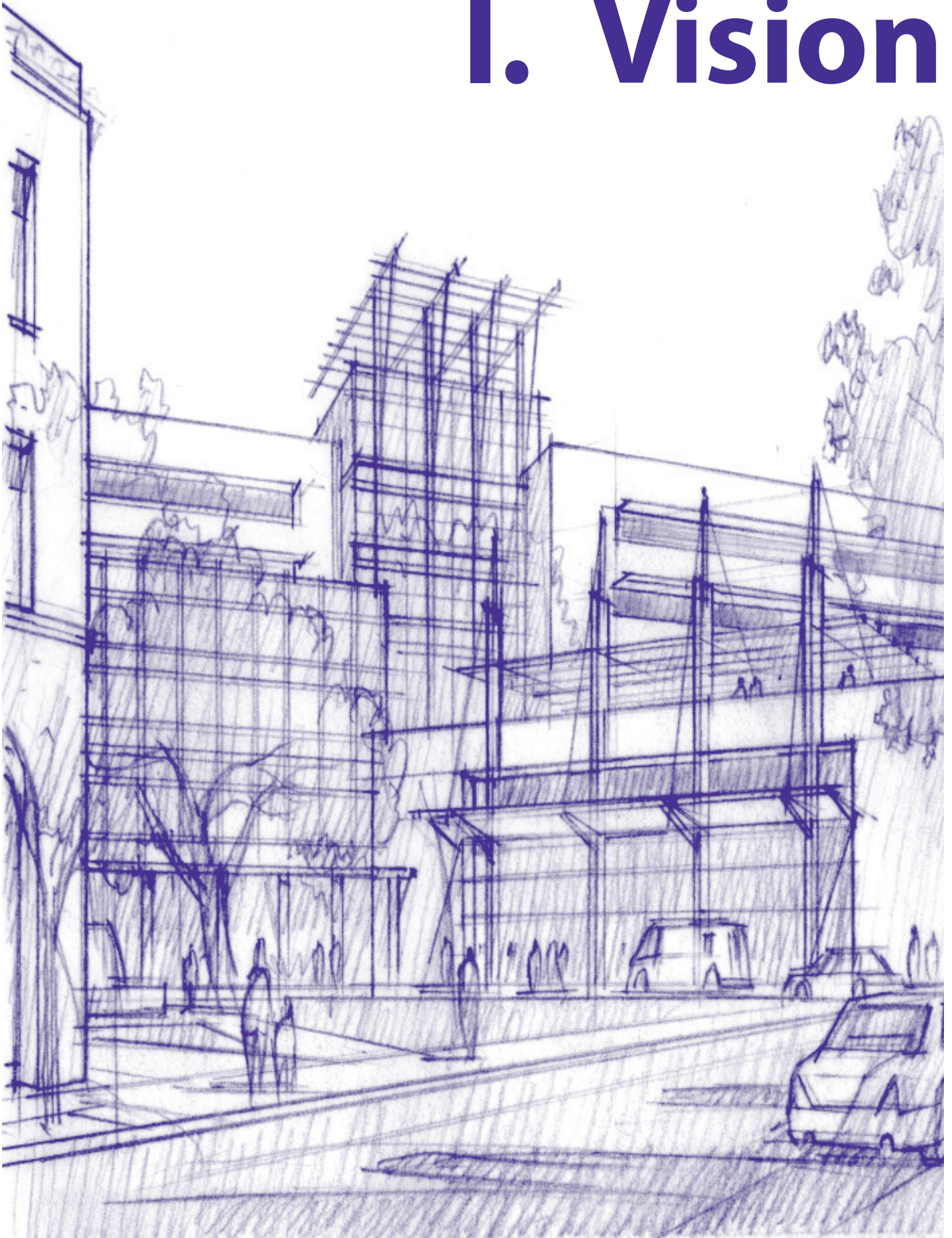
Figure 7b Access and Parking Alley Street Section..... 59

Figure 7c Access and Parking Alley Section 60

Table 1 Massing Standards..... 37

Table 2: Land Use..... 63

I. Vision





Plan Area



Design Charrette



Design Charrette



Design Charrette



A. Vision for the Plan Area

The shared vision for the future of this hospital district that emerged from the design Charrette process has been summarized in the Community Memorial Hospital District Master Plan. This Plan was based on the planning principles and specific guidance of the 2005 General Plan, and on the work of the several Midtown Community planning processes, including the Midtown Corridors Code process. The core principles underlying this work concerned the making a network of high quality, pedestrian-oriented public spaces, within which building of varied and mixed uses define a walkable and diverse public realm.

The purpose of the Community Memorial Hospital (CMH) District Master Plan is to leverage a unique opportunity—the building of a replacement hospital and the reconfiguration of the surrounding area into a walkable, pedestrian-oriented, and mixed-use district. To design such a complex project both rapidly and well, CMH sponsored a public design Charrette from April 21-25, 2008, which brought together a multi-disciplinary design team, key stakeholders from CMH, the City of Ventura, area property owners and residents, and the general public to engage in a participatory design and decision-making process for transforming the character of the area.

The primary objective of the design process was to define a hospital district that is a good neighbor to Main Street and the residential neighborhoods of Midtown Ventura. This objective is addressed from four main areas of interest:

- The connection between the new hospital building, and Main Street;
- The long-term vision and design intent of Main Street;
- The long-term character and orientation of Borchard Avenue; and
- The long-term vision for Loma Vista Road, consistent with the Midtown Corridors Development Code.

Design Charrette Team



Illustrative plan of Phase-1 for community Memorial Hospital District, with key Objectives

- A. Connection between new Hospital and Main Street via newly constructed "Hospital Way" and Open Space
- B. Long-term Vision for Main Street, Loma Vista Avenue, and Brent Street
- C. New Liners fronting new Open Space and "Hospital Way"
- D. New Seismically Conforming Hospital Building

1. Phase-1

The Phase 1 Illustrative Plan describes the anticipated development to be completed in Phase 1 of the Community Memorial Hospital District Master Plan, including the construction of the new Hospital building; a new open space connecting the new Hospital to Main Street; the re-orientation of Cabrillo Drive and construction of a new street - Hospital Way - a second entrance into the Plan Area from Main Street; and new liner buildings, fronting the new park and Hospital Way respectively. Additionally, Phase 1 includes streetscape improvements to Main Street, Loma Vista Road, and Brent Street.



Illustrative plan of Long-Term Character and Vision community Memorial Hospital District

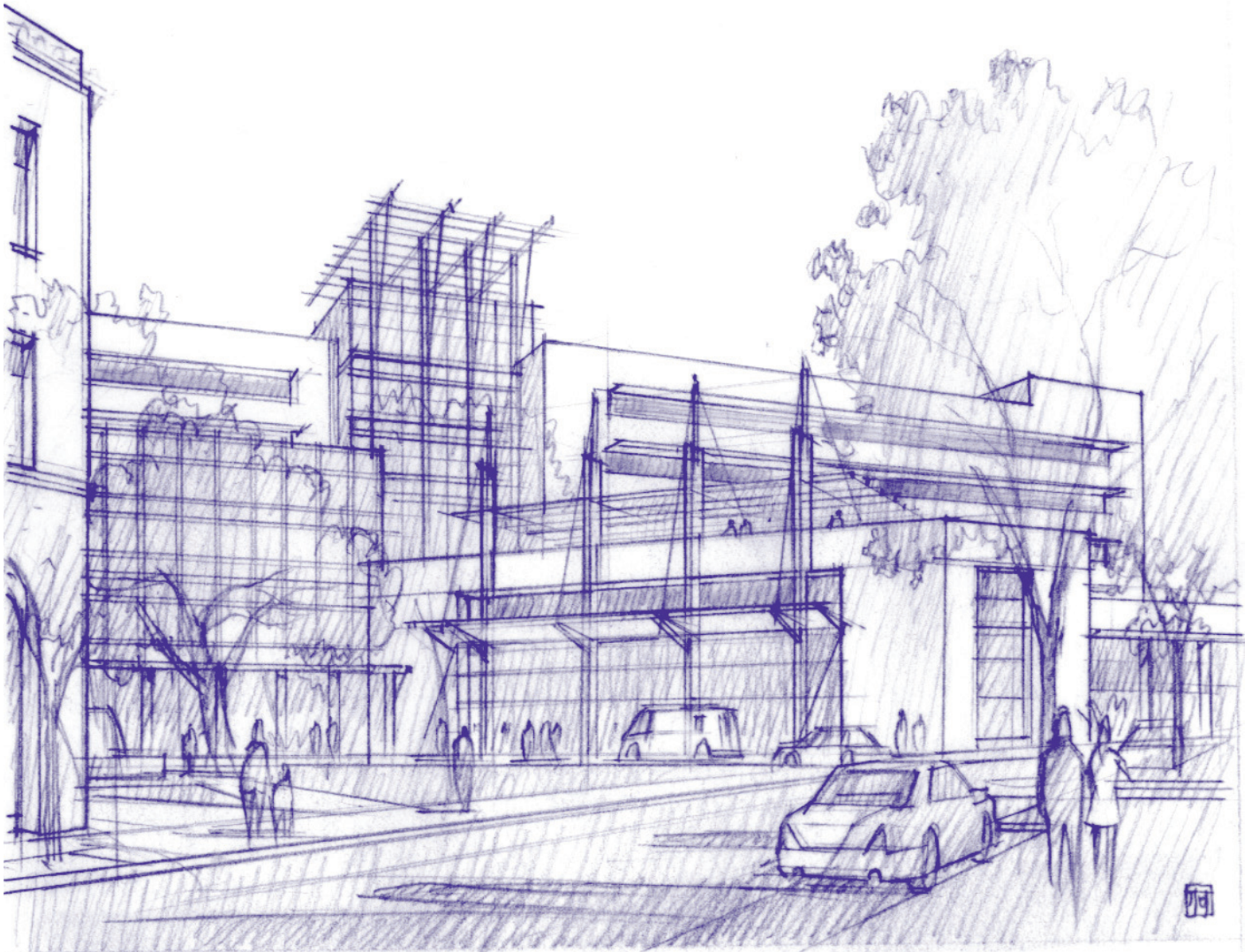
- A. Re-orientation of Borchard Drive connecting Main Street to Loma Vista Road
- B. New Open Space and Liner Building, adjacent Borchard Drive
- C. Construction of new Liner Buildings fronting Loma Vista Road
- D. Construction of new, lined Parking Structure



Existing parking structure lined with commercial uses.

2. Long Term Phase

The long term vision as anticipated in the Community Memorial Hospital District Master Plan, include the re-orientation of Borchard Drive, providing a street connecting through the Plan Area from Main Street to Loma Vista Road; the construction of a liner building on the west side of the existing parking structure, and the construction of a new open space, fronting the newly constructed Borchard Drive extension; the construction of liner buildings fronting Loma Vista Road, in addition to a new hardscaped parking court between the existing parking structure and the main Hospital; and the construction of a new, lined parking structure in the southeast portion of the Plan Area.



New CMH plaza and hospital entry.

3. A. Connection Between New Hospital and Main Street

One of the most crucial challenges to address was the creation of a public face for the new hospital, configured in a manner that befits its civic and institutional character. The best public access with minimal impacts on the surrounding neighborhoods is off Main Street, by way of a modified Cabrillo Street and a second—newly created—street from Main Street to Brent Street. The proposed design yields a canopy-covered main hospital entrance facing Main Street and a major civic plaza. Thus, the new public face of CMH exhibits a welcoming civic character - slow-speed streets, a clear and accessible drop-off point, a well-landscaped plaza, lively frontages and architecture that is sensitive to its surrounding context.

A second and fundamental design objective of the CMH District Master Plan is to ensure that the new hospital building is sensitive, in scale and character to the existing surrounding neighborhood context. As such, the requirements and regulations of this Code, provide the guidance and framework to ensure that these objectives are realized.



A perspective view of the civic square -- which can serve both visitors to the hospital and the general public -- and the parking garage with retail on the ground floor and public art covering the rest of the facade.



Conceptual sketch of Main Street looking east from Borchard Drive

4. Long-Term Vision and Design Intent for Main Street

Consistent with the vision of the Midtown Corridors Development Code, the CMH District Master Plan envisions that the new hospital and City investments in the District - particularly through the provision of a well organized shared parking supply - will spur additional private development along Main Street. Per the Midtown Code that development would likely take the form of new 3 to 4 story mixed-use buildings with retail and commercial uses on the ground floor and residential and office uses on the upper floors. Along with tree-lined sidewalks, curbside parking, slower but smooth traffic flows, and numerous specially marked pedestrian crosswalks, the new buildings will create the pedestrian-friendly character envisioned by the Midtown Code.

The standards for development along Main Street will remain those of the T.5.2 Urban Center Zone in the Midtown Code. The appropriate building types for this section of Main Street include commercial block, stacked dwellings as part of mixed type projects, courtyard buildings, and live/work. A modification of the Midtown Code will result from the introduction of the open space in front of the replacement hospital building, which requires shopfront frontages not only along Main Street, but also along Cabrillo Drive, Hospital Court, and fronting CMH Plaza.



Conceptual sketch of new green along Borchard Drive

5. Long-Term Character and Orientation of Borchard Drive

The Master Plan proposes introducing greater clarity and quality of urban space and building architecture at the western tip of the Plan Area through a number of strategies:

- Add a liner building with retail and/or office uses that screens the views of the existing parking structure;
- Redefine the existing parking lot drive aisle, which for many years has been the missing street connection between Virginia Drive and Borchard Drive, as a proper street; and
- Convert the remaining triangular area west of the new Borchard Drive Extension to a public park, providing a new high quality public space fronted by new mixed use buildings, in addition to creating a viable connection between the buildings regulated by the Midtown Development Code and the Master Plan Area.



New office liner buildings on Loma Vista Road and Brent Street



Loma Vista Road vision

6. Long-term vision for Loma Vista Avenue

Consistent with the Midtown Corridors Development Code, the Loma Vista Road frontage of the existing hospital will be lined, over time through phased implementation, with mixed-use liner buildings facing Loma Vista Road, gradually replacing the current surface parking lots.

Further east and off of Loma Vista, a newly designed and landscaped parking court offers surface parking under the shade of trees and serves as a convenient visitor parking lot. Modifications to the existing parking structure include liner buildings on the north facing Loma Vista Road and on the east facing the extension of Virginia Drive.

As more parking is accommodated curbside on Main Street, in the existing parking structure off the Virginia Drive extension, and the new parking structure near Cabrillo Drive and Brent Street, existing surface parking lots will be gradually transformed into more desirable uses such as parks. A new park is proposed off the Virginia Drive extension.

II. Code

24SD-H1.100

PURPOSE & DESIGN INTENT

24SD:H1.100.010 Title and Purposes of the Code

This SUBPART 24SD:H1 of the City of San Buenaventura Zoning Ordinance shall be known, and may be cited, as the “Community Memorial Hospital (CMH) District Development Code” or may be cited simply as the “CMH District Development Code”. References to “Code” or “Development Code” within the text of this CMH District Development Code are references to this Community Memorial Hospital (CMH) District Development Code unless the context clearly indicates otherwise, e.g., references to the “Municipal Code” mean the San Buenaventura Municipal Code; references to the “Government Code” are to the California State Government Code, and so on. This CMH District Development Code is adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of the community. More specifically, the purposes of this Code are to:

- A. Ensure that development is of human scale, primarily pedestrian-oriented, and designed to create attractive streetscapes and pedestrian spaces;
- B. Moderate vehicular traffic by providing for a mixture of land uses, pedestrian-oriented development, compact community form, safe and effective traffic circulation, including emergency vehicles, and appropriate parking facilities;
- C. Provide standards for the continuing orderly growth and development of the City that will assist in protecting and enhancing the community identity of Ventura;
- D. Conserve and protect the City’s natural beauty and setting, including scenic vistas, cultural and historic resources, hills and trees;
- E. Ensure that proposed development and new land uses conserve energy and natural resources; and
- F. Provide for compatibility between different types of development and land uses through effective urban and architectural design.

24SD:H1.100.020 Authority

This Development Code shall be administered by: the Ventura City Council, hereafter referred to as the “Council;” the Planning Commission, referred to as the “Commission;” the Community Development Director, referred to as the “Director;” the Zoning Administrator; the Community Development Department, hereafter referred to as the “Department,” and other City bodies and officials as identified in this Development Code.

24SD:H1.100.030 Responsibility For Administration

This CMH District Development Code shall be administered by the Community Development Director, referred to as the “Director;” and the other decision-making authorities as identified in this CMH District Development Code and the Zoning Ordinance. All findings, approvals, determinations, or other exercises of discretionary judgment or any other delegation of authority pursuant to this code by the director his successors or designees, or any other decision making authorities, shall be carried out in a manner consistent with the purposes of this CMH District Development Code, the Zoning Ordinance, the City’s General Plan, and the orderly development of the City.

24SD:H1.100.040 Applicability

This CMH District Development Code applies to all development, subdivisions, and land uses within the Regulating Plan boundaries in Section 24SD:H1.102.040, as follows:

A. REQUIREMENTS FOR NEW STRUCTURES OR LAND USES, OR CHANGES TO STRUCTURES OR LAND USES.

It is unlawful, and a violation of this CMH District Development Code for any person to establish, construct, reconstruct, alter, or replace any structure or land use, except in compliance with the following requirements, and Chapter 24.465 (Nonconforming Uses, Structures, and Lots). No planning permit, building permit or grading permit shall be issued by the City unless the proposed construction complies with all applicable provisions of this CMH District Development Code and all other applicable provisions of law.

1. Design and Development Standards, Conditions of Approval.

Each structure and land use shall comply with all applicable standards of this Hospital District Code, any additional regulations within the Zoning Ordinance for specific use types that are cited in Section 24SD:H1.203.030 (Land Use Tables), and any applicable conditions imposed by a previously granted discretionary planning permit or approval.

The provisions of Section 24SD:H1.211 Sign Standards and Design Guidelines would regulate the use of all signs. Signs for the Hospital will conform to a unified sign program, which shall be as approved by the Design Review Committee.

2. Allowable Use.

Land uses are allowed by this CMH District Development Code as permitted, or conditionally permitted, in the zone applied to the site. The basis for determining whether a use is allowed is described in Section 24SD:H1.203.030 (Land Use Tables).

3. Permit and Approval Requirements.

Any discretionary planning permit or other approval required by Section 24SD:H1.203.030 (Land Use Tables) must be obtained before the issuance of any required grading, building, or other construction permit, and before the proposed use, and any structures related to the proposed use, are constructed, otherwise established or put into operation.

4. Legal Lot

The site of a proposed development or new land use must be a lot or lots legally created in compliance with the Subdivision Map Act and the City's Subdivision Regulations.

B. SUBDIVISIONS.

Any subdivision of land proposed within the City shall comply with all applicable requirements of this CMH District Development Code, Subdivision Map Act and the City's Subdivision Ordinance.

C. MINIMUM REQUIREMENTS.

The provisions of this CMH District Development Code are minimum requirements for the protection and promotion of the public health, safety, and general welfare. When this CMH District Development Code provides for discretion on the part of a City official or body, that discretion may be exercised to impose conditions on the approval of any project proposed in the CMH District Development Code, as may be determined by the review authority to be necessary to establish or promote appropriate development and land use, environmental resource protection, and the other purposes of this Code.

D. INTERFACE WITH OTHER REGULATORY REQUIREMENTS.

1. Municipal Code Provisions.

This CMH District Development Code is a subpart of the Zoning Ordinance and the San Buenaventura Municipal Code. As is the case with other provisions of the Zoning Ordinance, all other provisions of the San Buenaventura Municipal Code continue to apply within the CMH District Development Code area except as expressly provided to the contrary in the CMH District Development Code. In any instance where there is no conflict between a requirement of this CMH District Development Code and a requirement or other provision of the Municipal Code because a regulatory subject is addressed elsewhere in the Municipal Code but not in the CMH District Development Code, such as, by way of example but without limitation, the entertainment permit requirements set forth in Chapter 10.450 of the Municipal Code, or the encroachment permit requirements set forth in Chapter 18.100 of the Municipal Code, the Municipal Code provision is intended to, and shall, apply.

2. Zoning Ordinance Provisions.

This CMH District Development Code is a sub-part of the Zoning Ordinance. If a conflict occurs between a requirement or other provision of this CMH District Development Code and a requirement or other provision of the Zoning Ordinance, the provision of this CMH District Development Code shall control regardless of whether the CMH District Development Code provision is more liberal or more restrictive. In any instance where there is no conflict between a requirement of this CMH District Development Code and a requirement or other provision of the Zoning Ordinance because a development-related subject is addressed in the Zoning Ordinance but not in the CMH District Development Code, the Zoning Ordinance provision shall apply.

3. CMH District Development Code requirements.

In the event of any conflict within the requirements of this CMH District Development Code, the provisions of Chapters 24SD:H1.204 (Frontage Type Standards), and 24SD:H1.206 (Building Type Standards) shall control over Chapter 24SD:H1.203 (Allowable Land Uses) and 24SD:H1.200 (Zones and Development Standards).

4. Development Agreements or Specific Plans.

If a conflict occurs between a requirement of this Development Code and an applicable standard adopted as part of a development agreement or specific plan, the requirement of the development agreement or specific plan shall apply.

5. Private Agreements.

This CMH District Development Code applies to all development and land uses regardless of whether it imposes a greater or lesser restriction on the development or use of structures or land than a private agreement or restriction (for example, CC&Rs), without affecting the applicability of the agreement or restriction.

24SD:H1.100.041 Approval Requirements

Each structure and land use shall be established, constructed, reconstructed, enlarged, altered, moved or replaced in compliance with the following requirements:

A. ALLOWABLE USE OR FUNCTION.

The land use or function must be allowed by the Development Standards (24SD:H1.200.010) in the zone where the site is located. Adult-oriented uses (i.e., Zoning Regulations Chapter 24.492) are prohibited within the Hospital District.

B. PERMIT AND APPROVAL REQUIREMENTS.

Any and all planning permits or other approvals required by this Development Code shall be obtained before the issuance of any required grading, building, or other construction permit, and before the proposed use is constructed, otherwise established or put into operation, unless the proposed use is listed as exempted below.

C. DEVELOPMENT STANDARDS, CONDITIONS OF APPROVAL.

Each land use and structure shall comply with the development standards of Chapter 24SD:H1.200 (Zones and Development Standards), Chapter 24SD:H1.204 (Frontage Type Standards), and Chapter 24SD:H1.206 (Building Type Standards), any applicable standard of Chapter 24 (Municipal Code), and conditions imposed by a previously granted planning permit.

D. NEW NONRESIDENTIAL LAND USE IN AN EXISTING BUILDING OR ON DEVELOPED SITE.

A land use identified by Chapter 24SD:H1.200 (Zones and Development Standards) as a “P” (Permitted) use, that is proposed on a site where no construction requiring a Building Permit will occur, shall require a Zoning Clearance as provided for below to ensure that the site complies with all applicable standards of this Development Code,

including parking, landscaping, signs, trash enclosures, etc. Zoning Clearance shall not be granted and the proposed land use shall not be established unless the site and existing improvements comply with all applicable requirements of this Development Code, except as provided by the Nonconformity Regulations of Zoning Ordinance Chapter 24.465. No Zoning Clearance may be issued if the request in question is located on the same site where there are existing violations of this plan, including, without limitation, violations of the terms of a discretionary permit or approval relating to the site. Zoning clearances shall expire 180 days after issuance, unless otherwise indicated on the clearance or unless the use of land or structures or building construction has commenced and is being diligently pursued.

E. DESIGN REVIEW.

Major Design Review, according to the procedural requirements of Zoning Regulations Chapter (Sec. 24.545) shall be required for the following:

1. All new development located within the SD:H1 Hospital District zone.
2. Additions and exterior changes to all structures providing for non-residential uses and all structures with over three dwelling units.
3. Proposed new buildings or significant landscaping in the Parks and Open Space Zone.
4. All new sign programs.

F. USE PERMIT.

A land use identified by Chapter 24SD:H1.203 (Allowable Land Uses) as a “UP” (Use Permit) use, shall require a Use Permit. Zoning Regulations Chapter 24.520 (Use Permit Procedure) specifies the Use Permit processing procedure.

G. CONSUMER RECYCLING COLLECTION.

Consumer recycling collection is permitted in either the SD:H1 Zone or the OS Zone and shall be located on a site whereby such activity does not occupy or displace required parking spaces or required landscaped areas. No more than six collection bins, containers, or reverse vending machines, not to exceed a total of 200 square feet in area, shall be located on any one site.

H. TREATMENT OF POTENTIAL HISTORIC RESOURCES

1. Prior to completion of the Historic Resources Survey for the area covered by the CMH District Development Code, all new development subject to the CMH District Development Code shall be evaluated on an interim basis as follows:
 - a. Applications for all development proposals involving structures over 40 years in age shall include a historic, technical assessment (or “Phase I”) prepared by a City-authorized historic professional.
 - b. Upon reviewing a “Phase I” historic assessment, the Community Development Director may request additional documentation in the form of a Phase II assessment.
 - c. Community Development Department staff shall evaluate the technical assessment (Phase I and/or Phase II) to determine whether the application involves a Historic Resource as defined by CEQA.

- d. If the Director determines a potential Historic Resource is present, but not formally designated as a landmark or already on a State or Federal register, the development proposal shall be reviewed by the Historic Preservation Committee (HPC) for compliance with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties.
 - e. If the Community Development Department Director determines a Historic Resource is not present, the development proposal shall be reviewed pursuant to the standards in Sections 24SD:H1.200 -24SD:H1.206.
2. Prior to completion of The Historic Resources Survey for the area covered by the CMH District Development Code, all requests to demolish a structure over 40 years of age in the Plan Area, shall be evaluated as follows regardless of whether new development or redevelopment is being proposed for the property in conjunction with such demolition:
- a. The Demolition permit application shall include a Phase I historic technical assessment. The Director or Building Official may request additional documentation via a Phase II technical assessment based on the conclusions of the Phase 1 assessment.
 - b. Community Development Department staff shall evaluate the Phase I and/or Phase II assessment to determine whether the demolition permit application affects a Historic Resource.
 - c. If the Director determines that a potential Historic Resource would be in part or wholly, demolished, an Initial Study shall be prepared for purposes of further CEQA evaluation.
 - d. The Historic Preservation Committee (HPC) shall review the resulting environmental document and demolition permit application (if it is prepared) at a public hearing with prior publication and mailed notice. Following the public hearing, the HPC may approve, conditionally approve, or deny the demolition permit application depending upon the application's potential to cause a significant environmental impact relative to the Historic Resource.

I. OTHER REVIEW PROCEDURES.

By way of example but without limitations, the following procedural requirements of the Zoning Regulations and State law shall also apply within the Hospital District:

Alcoholic Beverage Establishments (24.460)

Parking Determination Procedure (24.512)

Development Agreement Procedure (24.550)

Specific Plan Procedure (24.555)

Notice and Hearing Requirements (24.560)

Appeal Procedure (24.565)

Permit Amendment, Revocation and Reevaluation Procedure (24.570)

Enforcement Procedure (24.580)

Subdivision Regulations (Municipal Code Division 26)

24SD:H1.100.042 Variances: Warrants and Exceptions

The Administrative Variance procedure set forth in Chapter 24.535 shall not apply in the Hospital District. Instead, there shall be two levels of deviation from the evaluation standards of the CMH District Development Code: Warrants and Exceptions.

A. TYPE.

Variances are classified into two categories based on their assignment to evaluation, standards and, consequently, the ability of those standards to further the goals, policies and actions of this plan. Mere economic or financial hardship alone is not sufficient justification for granting either a Warrant or Exception.

1. Warrant.

- a. A Warrant is a deviation that would permit a practice that is not consistent with a specific provision of this code, but is justified by its ability to fulfill this code's intent while not compromising its purpose, policies and actions.
- b. Any Building Type performance standard with the notation "[W]" indicates a mandatory requirement unless Warrant approval is obtained.
- c. All of the following Zone and Development Standards are mandatory requirements unless approval of a Warrant is obtained:
 - i. Building Placement: Architectural Encroachments
 - ii. Building Profile and Frontage: Building Height up to 5 feet over the Development Standard.
 - iii. Building Type: Minimum Lot Width - by no more than a 10-foot reduction and where all requirements of Chapter 24SD:H1.206 (Building Types), exclusive of those measures designated [DR], are met.
 - iv. Parking: Parking Requirements
- d. Warrants are subject to Director review and action in an Administrative Hearing including prior publication and mailed notice.
- e. Warrants are discouraged but may be permissible when they fulfill the code's purpose, policies and actions.
- f. Warrants may be obtained for approval of Civic Buildings that do not conform to the Zone and Development Standards Chapter 24SD:H1.200.

2. Exceptions

- a. An Exception is a deviation that would permit a practice that is not consistent with a specific provision of this code that is critical to the furtherance of its purpose, policies and actions.
- b. Any Building Type performance standard with the notation "[E]" indicates a mandatory requirement unless Exception approval is obtained.

- c. All of the following Zone and Development Standards are mandatory requirements unless approval of an Exception is obtained:
 - i. Building Placement: Primary Buildings
 - ii. Building Profile and Frontage: Building Height over 5 feet and less than 10 feet over the Development Standard.
 - iii. Building Placement: Accessory Buildings as relate to Primary Buildings
 - iv. Parking: Parking Placement
- a. Exceptions are subject to Planning Commission review and action, including prior publication, mailed and posted notice.
- b. Exceptions are strongly discouraged since they severely compromise the ability to fulfill the code's goals, policies and actions.

3. Design Review

- a. Any building type evaluation standard that, regardless of the use of terms such as "should" and "shall," is followed by the notation "[DR]" indicates a permissive requirement that is subject to Design Review. No Warrant or Exception shall be required.

B. LIMITATIONS.

The following evaluation standards shall not be eligible for Warrants or Exceptions:

- 1. Building Type - Minimum Lot Width reduction of more than 10-feet and where all requirements of Chapter 24SD:H1.206 (Building Types), exclusive of those measures designated [DR] are not met.
- 2. Land use or activity on a particular site which is not otherwise allowed.
- 3. Home Occupations.

C. SUBMITTAL REQUIREMENTS.

Each Warrant or Exception application shall include, at a minimum, the following:

- 1. A statement of the evaluation standard or standards that are the subject of the proposed Warrant or Exception;
- 2. A textual description of the manner in which the applicant proposes to deviate from such evaluation standard or standards;
- 3. Plans, drawn to scale, showing the nature, location, dimensions, and elevation of the structure, area, or part thereof that is the subject of the proposed Warrant or Exception; including the development projects relationship to the surrounding context;
- 4. A justification for the proposed variance in light of the requirements set forth above; and
- 5. Such other information as may be required by the Director, DRC, Commission or Council.

D. PROCESSING.

Both Warrants and Exceptions shall be reviewed and acted upon in accordance with the procedural requirements of Zoning Regulation Sections 24.535.150 through 24.535.230.

E. FINDINGS.

In order to approve a Warrant or Exception, the review authority must make all of the following findings:

1. All warrants:
 - a. The Warrant, while not consistent with a specific provision of this Code, is justified by its intent or by hardship.
 - b. The Warrant would result in development compatible with the scale and character of existing development in the vicinity.
 - c. The Warrant would result in development that is not detrimental to or that would adversely impact adjacent properties.
 - d. The project authorized by a Warrant or Exception is consistent with the policies and provisions of the 2005 Ventura General Plan.
 - e. The project authorized by a Warrant or Exception is consistent with the policies and provisions of the CMH vision.
2. Warrants for Civic Buildings in addition to (1) a, b, and c, above: The Civic Building provides a public service dedicated to arts, culture, education, recreation, government, transit and/or public parking and is uniquely designed to feature as a prominent, architecturally significant contribution to the built environment such that exemption from the provisions of Chapter 24SD:H1.200 is warranted.
3. Exceptions: The parcel of property has physical characteristics so unusual that complying with the associated standards would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the existing or proposed structure, its inhabitants, or the property owners.

F. CONDITIONS OF APPROVAL.

In approving a Warrant or Exception, the review authority:

1. May impose any reasonable conditions to ensure that the approval complies with the findings required above.

24SD:H1.100.043 Exemptions From Planning Permit Requirements

The planning permit requirements of this Development Code do not apply to the structures, land uses, and activities identified by this Section. These are allowed in all planning areas subject to compliance with this Section.

A. GENERAL REQUIREMENTS FOR EXEMPTION.

The land uses, structures, and activities identified by Subsection B. below are exempt from the planning permit requirements of this Development Code only when:

1. All permits or approvals required by City regulations other than this Development Code are obtained (for example, a Building Permit).

B. EXEMPT ACTIVITIES AND LAND USES.

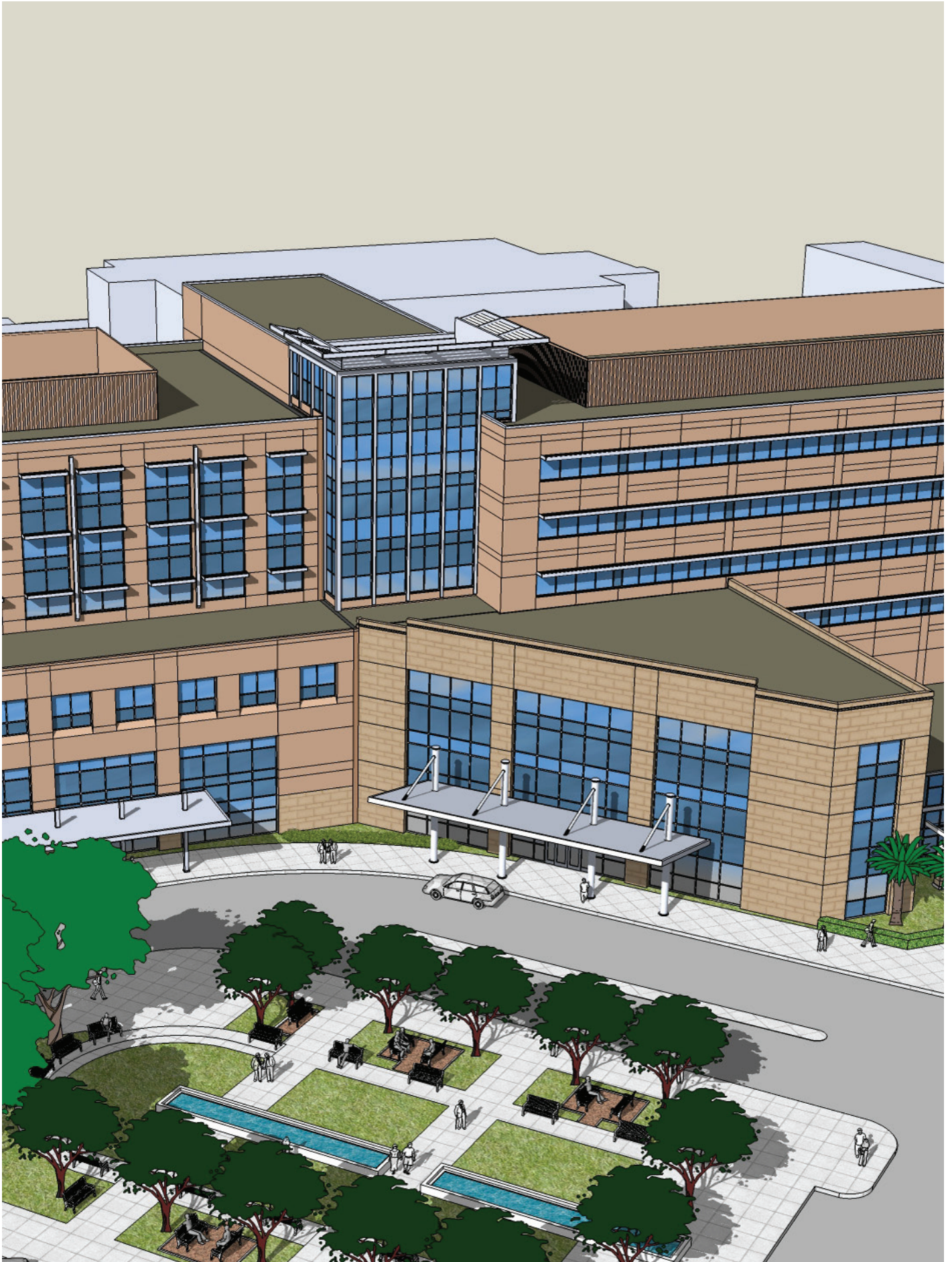
The following are exempt from the land use permit requirements of this Development Code when in compliance with Subsection A. above.

1. Decks, paths and driveways. Decks, platforms, on-site paths, and driveways that are not required to have a Building Permit or Grading Permit.
2. Fences and walls in compliance with height and location requirements in the SD:H1 Hospital District zone, and fences and walls in the Parks and Open Space Zone that are integral design elements of a plaza.
3. Interior remodeling. Interior alterations that do not increase the gross floor area of the structure, or change the permitted use of the structure.
4. Repairs and maintenance.
 - a. Multi-family, and non-residential structures. Ordinary non-structural repairs to, and maintenance of multi-family residential and non-residential structures, if:
 - i. The work does not change the approved land use of the site or structure, or add to, enlarge or expand the land use and/or structure; and
 - ii. Any exterior repairs employing similar materials and design as the original construction.
5. Utilities.

The erection, construction, alteration, or maintenance by a public utility or public agency of utilities intended to service existing or nearby approved developments shall be permitted in any zoning district. These include: water; gas; electric; supply or disposal systems; including wires, mains, drains, sewers, pipes, conduits, cables, fire-alarm boxes, police call boxes, traffic signals, hydrants, etc., but not including new transmission lines and structures. Satellite and wireless communications antennas are not exempt, and are instead subject to Chapter 24SD:H1.200 (Zones and Development Standards) and Zoning Regulations Chapter 24.497 (Telecommunications Facilities).

24SD:H1.100.050 Rules of Interpretation

Except for Section 24SD:H1.102 (relating to the interpretation of Regulating Plan and Zone Boundaries) and Section 24SD:H1.203.030 (relating to the interpretation of Land Use Tables), the interpretation of any provision of this CMH District Development Code, including the implementation of the Regulating Plan, shall be carried out in accordance with Section 24.105.080.



24SD:H1.100.060 Design Intent and Use of Code

A. URBAN DESIGN INTENT.

The CMH District Development Code defines development standards for the design of buildings and related site improvements within the areas mapped on the Regulating Plan, Section 24SD:H1.102.040.

Generally, the Zoning Ordinance mainly regulates the intensity and use of development, while this CMH District Development Code implements the General Plan more closely by defining and regulating the urban form and character of development as well as its intensity and use.

Many of the standards in this Code are similar to those in other Zones throughout the City, including building setbacks and height limits. However, this CMH District Development Code also provides standards for specific “frontage types” that ensure an urban form and character that is suitable to Ventura. These “types” have been selected, and are defined herein, to ensure that the form of new buildings, and their location and configuration upon their lot, is specifically appropriate to Ventura, in particular to the Hospital District, as they abut existing neighborhoods.

It is important to note that Building Types describe the general form, scale, organization and urban character of buildings. This is different from and generally independent of architectural style. The several Frontage Types available in a Zone may be combined in a virtually unlimited number of ways by a skilled designer to meet programmatic requirements, to respond with sensitivity to the existing surrounding urban context, and to become a seamless part of a varied yet unified streetscape and public realm.

In order to define and regulate development that will achieve these goals, while ensuring that it is also compatible with the scale and character of adjoining neighborhoods, two Transect Zones have been established for the Hospital District: SD:H1 and P&OS. The SD:H1 zone describes and regulates the intended scale and character of development for properties, as mapped on the Regulating Plan, Section 24SD:H1.102.040. The Parks and Open Space (P&OS) Zone describes and regulates the intended scale and character of open spaces in the Plan Area, as mapped on the Regulating Plan, Section 24SD:H1.102.040. For a complete description of these zones see Section 24SD:H1.102.030.

B. HOW TO USE THIS CODE.

To find the development standards that apply to a particular parcel of land, the following steps should be taken:

1. Locate the subject parcel on the Regulating Plan (Section 24SD:H1.102.040).
2. Note the Zone designation for that parcel, SD:H1 or Midtown Corridor Code.
3. Also note any special designations for that parcel that may be present on the Regulating Plan, such as a “shopfront required” overlay, as these requirements will supersede other provisions in the SD:H1 Zone standards.
4. To determine the uses that are allowed in that Zone, refer to the Land Use Tables (Section 24SD:H1.203.030).
5. Then refer to the Zone standards for the Zone that applies to the subject parcel. SD:H1 standards are located in Section 24SD:H1.200.020. These standards provide all the basic setback and height requirements for the parcel. Note that Frontage Overlays (See Regulating Plan - Figure 1) may adjust setback dimension, and supersede the information on the zone page.
6. The Zone standards specify the setback and height regulations for buildings, parking and associated site improvements, and also identify the Building Types and Frontage Types that are allowed.
7. A range of Building Types is presented in Section 24SD:H1.206.
8. A range of Frontage Types are presented in Section 24SD:H1.204. One of the Types allowed in the applicable Zone must be selected, and integrated with the selected Building Type.

24SD-H1.102

REGULATING PLAN AND ZONES

24SD:H1.102.010 Purpose

This Section establishes the zones applied to property within the City and adopts the Regulating Plan for the Hospital District area as its zoning map.

24SD:H1.102.020 Regulating Plan Zones

The Council hereby adopts the Hospital District Regulating Plan (hereafter referred to as the “Regulating Plan”), as shown in Figure 102.040, as an amendment to the zoning district map authorized by Section 24.105.040 (Adoption of the Zoning District Map).

A. ZONES ESTABLISHED

The area within the Regulating Plan boundaries (the “Community Memorial Hospital District Master Plan Area”) is subject to this Hospital District Development Code, and shall be divided into two zones that implement the Ventura General Plan. The zones described in Section 24SD:H1.102.030 (Zone Descriptions) are hereby established, and shall be shown on the Regulating Plan for the CMH District Master Plan area.

B. INTERPRETATION ZONE BOUNDARIES

If there is uncertainty about the location of any zone boundary shown on the Regulating Plan, the location of the boundary shall be determined by the Director as follows.

1. Where a zone boundary approximately follows a lot line, alley, or street line, the lot line, street or alley centerline shall be construed as the zone boundary, as applicable;
2. If a zone boundary divides a parcel and the boundary line location is not specified by distances printed on the Regulating Plan, the location of the boundary will be determined by using the scale appearing on the Regulating Plan while remaining consistent with applicable requirements such as minimum lot depth; and
3. Where a public street or alley is officially vacated or abandoned, the property that was formerly in the street

or alley will be included within the zone of the adjoining property on either side of the vacated or abandoned street or alley.

C. ZONES AND OVERLAYS

Each of the two zones represents a spectrum of development characteristics and intensities. The use of zones allows the standards to be calibrated to existing neighborhood characteristics on adjacent land that are intended to be preserved, protected or extended. The two basic Zones defined in this Code are Zones SD:H1, and P&OS, as described in Section 24SD:H1.200.

Additionally, a Frontage Overlay has been added to regulate the design of specific new frontages that are envisioned by the Master Plan. The Frontage Overlay is described in further detail in Figure 1 (Regulating Plan).

24SD:H1.102.030 Zone Descriptions

This section contains detailed descriptions of the general character of Hospital District Zone SD:H1, and Parks and Open Space Zone P&OS.

A. HOSPITAL DISTRICT ZONE (SD:H1)

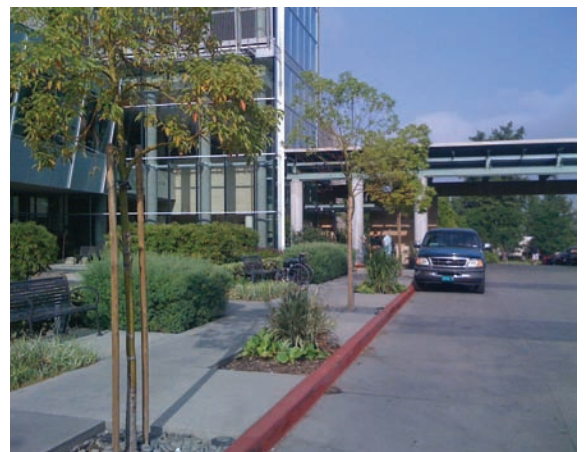
The Hospital District Zone is intended to enable a large and vitally important civic institution to operate and grow within an urban context, immediately adjacent to a mixed-use district and residential neighborhoods. The functional demands on hospital facilities—including a complex set of programmatic requirements for internal adjacencies, privacy, radiation, shielding and for constant growth and change—lead to relatively large, simply shaped and inwardly oriented buildings. Such buildings tend to be incompatible with the scale and character of urban districts or neighborhoods; this Zone provides standards for the size, orientation, massing and frontage design of hospital facilities which—along with rigorous design review—will help deliver buildings whose scale and character are compatible with their urban context.



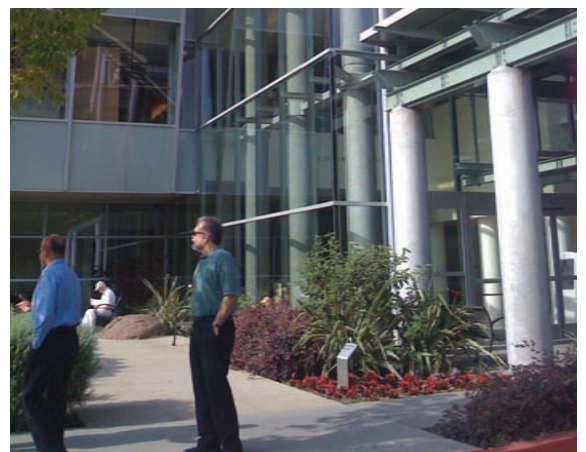
Open space integrated with hospital building



Smaller volumes at edges of hospital building



Garden in front of hospital



Glass-covered natural-light-filled lobby of hospital



Liner with ground floor retail



Liner with neighborhood-compatible facade



Parking garage surrounded by multiple uses

The primary uses within the SD:H1 Zone are medical treatment facilities, along with ancillary uses such as laboratories, offices, and support retail and restaurant functions. Hospital-related residential uses are also allowed, providing housing opportunities for medical staff and visitors within the hospital campus.

Because of the unique nature of hospital facilities, the building massing and character standards for the SD:H1 Zone are described in relation to a massing model that was developed through a Charrette process with the community. This is in contrast to the standards that have been adopted for the Midtown Corridors Code and the Downtown Code, which describe massing and character in terms of traditional urban building types.

The SD:H1 Zone massing standards accommodate taller and wider buildings within the center of the zone, responding to medical and regulatory requirements, with shorter and narrower buildings at the edges of the zone to ensure a more human scale that is in scale with nearby residential and retail context areas. The streetscapes and civic spaces that conjoin the hospital buildings with their urban neighbors are fully urban in character, and are designed and landscaped in support of ground floor retail and civic uses.

Accessibility is a vital requirement for a hospital facility, and providing convenient access for all employees, patients and visitors within the relatively tight urban context requires a sophisticated, managed approach to transportation and parking.

Parking is a key concern of the businesses and residents in surrounding neighborhoods, who fear that spillover parking from the hospital facilities may unreasonably impact their areas. A multi-faceted strategy of reducing parking demand through transportation demand management and managing a shared supply of public and private parking has been developed to ensure an adequate but not excessive supply of parking. Three parking structures –the existing structure on Loma Vista Road, the structure in the Medical Office Building on Brent Street, and a future structure at Cabrillo Drive and Brent Street – and a network of on- and off-street surface parking facilities will meet existing and future parking demands. These structures will be wrapped with ground floor commercial liners to support a pedestrian-oriented urban district character.

B. PARKS & OPEN SPACE ZONE (P&OS)

The Parks and Open Space Zone (P&OS) is comprised of two public open spaces, owned by the City of Ventura, which have been designed to insert civic open space into what is currently the Hospital Triangle superblock, bounded by Main Street, Loma Vista Road, and Brent Street. The first is a plaza on the south side of a realigned Cabrillo Drive, providing a strong civic frontage for the major hospital building entry. The second is a square along the west side of a northerly extension of Borchard Drive, providing a public open space for future mixed-use development. (See Regulating Plan, Section 24.102.040).



Edge condition of square with trees and benches



Plaza with fountains

Pavilion as focal point of square



24SD:H1.102.040 Regulating Plan

The following page is the Regulating Plan for the Hospital District Development Code. The Regulating Plan is also used as the coding key for the Hospital District Development Code.



24SD-H1.200

ZONES & DEVELOPMENT STANDARDS

24SD:H1.102.010 Hospital District Zone (SD:H1)

A. INTRODUCTION

The Hospital District is located at the conjunction of existing neighborhoods to the north and east, and a commercial corridor in transition - Main Street - to the south and west. The adjoining neighborhoods are subject to conventional residential zoning under the City's existing Zoning Ordinance, and the Main Street Corridor is subject to the Midtown Corridors Code that has recently been incorporated into the Zoning Ordinance.

The Regulating Plan of the Midtown Corridors Code has assigned the T 5.2, Urban Center Zone, to all of the lots within the hospital triangle that front Main Street, and to lots that front Loma Vista Road in the westerly portion of the triangle. The Midtown Corridors Code did not apply zoning to the northeasterly portions of the triangle Plan Area- the location of the hospital proper - because it is clear that special zoning of a different sort is required for these large, specialized facilities.

The unique programmatic and adjacency requirements of such medical facilities concentrate larger amounts of floor area and building volume in single elements than is necessary in a typical mixed-use neighborhood or district. The central characteristic of the building types and frontage types that populate the zones of the Midtown Code is that they are compatible in both scale and character with the traditional neighborhood fabric of pre-1945 Ventura. This cannot reasonably or productively be applied to the very large, single-use buildings that a modern hospital complex requires.

It is critically important, however, that the scale and massing of the hospital and related medical facilities be reasonably compatible with the scale of the surrounding neighborhoods and corridor. Accordingly, the form-based development regulations for the Hospital District Zone are focused on shaping the building volumes in appropriate ways to ensure that building frontages are oriented and scaled to the pedestrian.

24SD:H1.200.020 Massing and Development Standards

A. DESCRIPTION



Unlike the mixed-use building types along Main Street the hospital and medical office buildings are not traditional neighborhood types.

The setbacks and height regulations for all buildings within the SD:H1 zone are as shown on the Massing Regulating Plan and Table 1 and are explained in the following narrative.

Massing Elements D, E, F and G comprise the planned new main hospital tower. Elements A, B and C are required in association with Elements E and G, and are intended to moderate the bulk and scale of the main tower, transitioning the new facility into scale with the mixed-use buildings along Main Street and with the pedestrian scale and character of CMH Plaza. A dining terrace is required along Cabrillo Drive as an extension of Element C.

Element D is particularly important to the success of this massing scheme, and is intended to moderate the bulk and scale of Element E, which would otherwise be grossly out of scale with the neighborhood to the east of Brent Street. With a detailed design review and approval, Element D may be either a building with habitable space at the ground level, or a garden element with spandrel glazing behind it.

The existing hospital buildings - as of 2010 - lie within Massing Elements H, I and K. To provide for future modifications and expansions, while ensuring neighborhood compatibility and appropriate urban design, these massing standards define “envelopes” around the existing buildings, within which additions or new structures may be constructed.

Element H is currently the main hospital entry, and is set back from the street behind a garden. If this element is enlarged or replaced in the future, it is to retain the garden in some form, and to present a street façade more rather than less transparent to the street.

Elements I and K allow for a hospital tower and wing, respectively, with the largest element (K) within the center of the block.

Element J is a group of 2 or 3 story buildings fronting Loma Vista Road, facing similarly scaled professional office buildings across the street.

Figure 2 Massing Regulating Plan



Table 1 Massing Standards

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Use	New Hospital							Liner	Support	Liner	Support	Liner	Parking Structure		Liner
Width (min, max)	150' (min)	100' (min)	100', 130'	75', 100'	150', 200'	40', 50'	150', 200'	150', 200'	150', 200'	100', 200'	150', 200'	200', 275'	100', 135'	100', 130'	100', 135'
Height (min, max)	45', 65'	40', 55'	25', 55'	25', 55'	45', 90'	110', 130'	45', 90'	50', 65'	50', 65'	25', 50'	90', 130'	25', 55'	25', 55'	25', 55'	25', 55'
Depth (min, max)	20', n/a	n/a	50', 70'	20', n/a	70', 110'	40', 60'	70', 110'		70', 110'	50', 100'	70', 110'	30', 50'	n/a, n/a	n/a, n/a	n/a, n/a
Setback (min, max)	0', 20'	0', 5'	20', 40'	0', 20'	20', n/a	n/a, n/a	20', n/a	40', 60'	20', n/a	0', 20'	100', n/a	0', 10'	0', n/a	0', 20'	0', n/a



B. ACCESS

1. Elements H, I, J, L, and O shall have streetfront entrances. Entrances on elements J, L, and O shall be spaced no more than 100' apart, on center, and shall be open to the public during regular business hours.
2. Pedestrian access to all buildings shall be provided from the adjacent streets.
3. Primary entrances to the hospital shall be provided in Mass Elements A and B, and are encouraged elsewhere to the extent feasible.
4. Parking and all services shall be accessed from an alley or parking garage. Service access shall be concentrated in the central service court unless that can be demonstrated to be infeasible.

C. BUILDING SIZE AND MASSING

1. The size and massing of all buildings in the SD:H1 Zone shall conform to the standards presented in Table 1.

D. FRONTAGE

1. Only forecourt, shopfront and awning, stoop, gallery and arcade frontages are allowed in SD:H1 zone. Permitted

residential units (listed in Table 2: Land Use) may have a porch frontage type.

E. LANDSCAPE

1. Frontage setbacks to Element C shall be hardscaped and landscaped with an entry garden and a dining terrace, with planting and low wall elements that provide a degree of privacy for diners but that do not obscure views or prevent pedestrian circulation into and out of the dining terrace.
2. Frontage setbacks to Elements A, D, H, I, and J shall be landscaped and/or hardscaped as vertical gardens and/or garden forecourts.
3. No landscaping, (other than street trees) [•], shall be required along the portions of the frontages of elements A, B, L or O, where the building is provided with a Shopfront meeting the requirements of this Code.
4. Element N requires vertical landscaping and softening where element N fronts courtyards of element O, or when fronting alleys.
5. Vertical gardens can employ trellis structures, vines, wall planting systems and/or columnar, upright, and festigated trees strategically placed to soften the massing of adjacent structures.

[•] Except where special bio-filter infiltration systems are required; Refer to the Community Memorial Hospital District Master Plan, Section 2.2.3 - “Storm Water Management Strategies”, for suggested infiltration system locations.

24SD:H1 200.030 Parking Standards

A. INTRODUCTION AND SUMMARY

Based on the analysis of parking demand by land use and attribution of observed peak parking occupancy within the district, the following minimum parking requirements shall apply for new development within the Plan Area:

1. For the CMH campus, (CMH, Medical Office Building, and Radiation/Oncology Center uses), the following parking requirements apply :
 - 2 parking spaces are required per bed for hospitals.
 - 1 parking space are required per 300 square feet for all other nonresidential land uses.
 - 1 parking space per 1500 S.F. Min.1 parking space is required per unit for all residential uses.

When these parking standards are applied to existing land uses within the Plan Area, they predict the parking occupancy actually observed during the peak hour. This occupancy includes vehicles parked both on and off-street, and therefore, on-street parking spaces may be counted towards satisfaction of minimum parking requirements.

Off-site parking is allowed, within 1,250 feet, to satisfy 100% of the minimum parking requirement. Off-site parking located further then 1,250 feet may be allowed with the approval of the Community Development Director.

24SD-H1.204

OVERLAY ZONES

24SD:H1.201.010 Purpose and Applicability

A. PURPOSE.

To provide an even finer level of precision and subtlety – without the need to describe more new sub-zones for each of the 6 basic transect zones – the technique of “Overlay Zone” is added. Overlay Zone is applied to specific areas of the Regulating Plan, modifying selected development standards of the underlying Transect Zone. For instance, such an “overlay zone” would modify allowed frontage types requirements within the Overlay area as designated on the Regulating Plan, while leaving the other standards of that zone intact.

This Section provides regulations for development in the overlay zone that is identified in this Section applied to property by the Regulating Plan (Section 24SD:H1.102). Overlay zone provide standards that apply in addition to those of the primary zone, to address important and localized site, environmental, safety, compatibility, or design issues.

B. APPLICABILITY.

The provisions of this Section apply to proposed development in addition to all other applicable requirements of the primary zone. In the event of a conflict between a requirement in this Section and the primary zone, the requirement in this Section shall control.

1. Mapping of Overlay Zones.

The applicability of an overlay zone to a specific site is shown by the Regulating Plan (Section 24SD:H1.102).

2. Allowed land uses, Permit requirements, Development standards.

Except as may be otherwise provided by this Section for a specific overlay zone:

- a. Development and new land uses within a overlay zone shall comply with all applicable development

standards of the primary zone, and all other applicable provisions of this Development Code;

- b. Any land use normally allowed in the primary zone by this Development Code may be allowed within a overlay zone, subject to any additional requirements of the overlay zone; and
- c. Development and new land uses within a overlay zone shall obtain the zoning approvals required by this Development Code for the primary zone.

24SD:H1.201.050 Shopfront Overlay (SF)

A. PURPOSE.

The Shopfront Overlay identifies street frontages intended to become or be maintained as areas for retail shops and other pedestrian-oriented uses at the sidewalk level.

B. APPLICABILITY.

- 1. The street-facing facade of each building within the Shopfront Overlay shall be designed as the Shopfront & Awning, Gallery, or Arcade frontage type, in compliance with Section 24SD:H1.204.
- 2. Forecourt frontage type is permitted where facade is set back by 10' or more (per Section 24SD:H1.204).
- 3. A "porch" of "stoop" frontage is permitted for lots fronting the future park site to be constructed at the Borchard Drive extension. The future park site is located in and regulated by the Midtown Corridors Development Code Area.

24SD-H1.202

THE PUBLIC REALM

24SD:H1.202.010 Purpose

The Plan area is to be regenerated from a complex collection of disparate buildings into a coherent, mixed-use, and pedestrian-oriented town center. Thus, the public realm: plazas, village greens, and streetscapes is designed to enable urban life to thrive in close context with the natural environment.

This section provides the requirements to guide and inform the character of the open space network and its landscape for the Hospital District. This section directs attention to both principles and details that give a place its individual character. Such principles and details will mature the Hospital District into an a unique and beloved place within the City of Ventura.

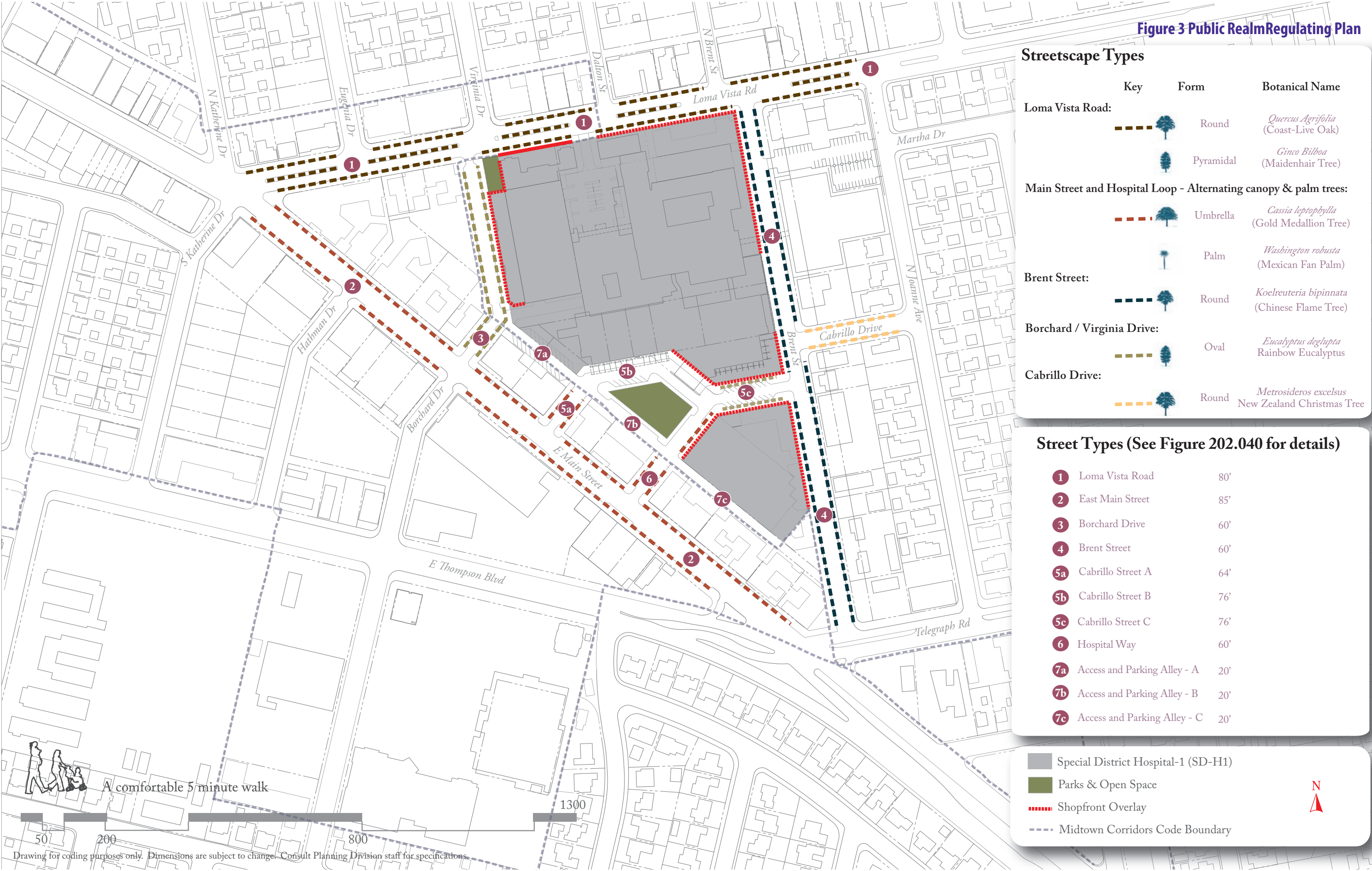


The public realm vision: Illustrative diagram from the CMH District Master Plan

24SD:H1.202.020 Public Realm Regulating Plan

The following page is the Public Realm Regulating Plan for the CMH District Development Code. The Public Realm Regulating Plan is also used as the coding key for the CMH District Development Code.

Figure 3 Public RealmRegulating Plan



24SD:H1.202.030 Parks & Open Space Zone (OS)



Illustrative diagram of plaza

This Section identifies the open space requirements and types allowed within the Hospital District Master Plan area and provides design standards for each type to ensure that proposed development is consistent with the City's goals for character and quality of the public realm for the Hospital District.

A. PLAZA

A plaza is an open space available for unstructured recreation and civic purposes. A plaza is spatially defined by building frontages. Its landscape ranges from the lush to that of more prevalent hardscape, and consists of paths, lawns and trees, formally arranged. Plazas shall be located at the intersection of important thoroughfares and/or in front of major civic buildings.

1. **Programming and Uses**
 - a. Zone Designation: P&OS.
2. **Access**
 - a. Access shall be provided from the adjacent sidewalk(s) by accessible paths.
 - b. Adjacent pedestrian crossings shall coordinate with the access points of the plaza.
 - c. Adjacent buildings shall front the plaza.
 - d. Approaches from the adjacent pavement shall be accessible and consistent with the design theme for the particular plaza.
3. **Parking**
 - a. No on-site parking is allowed.
 - b. Street parking along the plaza's frontage shall be minimal in order to maximize views from adjacent sidewalks into the plaza.
4. **Landscape**
 - a. Landscape shall consist primarily of lawns or drought tolerant plantings and soft permeable paving, and may include planting beds.
 - b. Trees shall be arranged formally and at maturity, must be of a species that is sufficient in scale for their particular context.
 - c. Formally arranged trees, shall be spaced from 25-30' on-center, and shall reach a minimum canopy height of 25', ranging up to 45'.
 - d. Informally arranged trees are those arranged in groupings, and shall reach a minimum height of 35',

ranging up to 70' for canopy trees, and up to 100' for palm trees.

- e. Trees shall be a combination of the adjacent street tree species and any other appropriate drought tolerant species, including natives in compliance with Figure 3.

5. Hardscape

- a. Materials shall be more elaborate in nature (such as brick, stone, and concrete). Asphalt is prohibited.
- b. Complicated and distracting paving patterns are prohibited.

6. Frontage

- a. Plazas shall front at least one (1) street.
- b. General visibility from one side of the plaza to an other is required (berms and hedges may not exceed 36" in height).

7. Buildings, Improvements, and Lighting

- a. The following buildings and improvements are permitted, subject to approval by the City of Ventura Design Review Committee:
 - i. Buildings: pergolas, bandstands, kiosks.
 - ii. Improvements: pedestrian amenities (benches, tables, garbage cans, etc.), public art and/or water features that provide a focus to the plaza.
- b. Pedestrian scaled light fixtures are permitted along paths.



Illustrative photograph



Illustrative photograph

24SD:H1 202.040 Streetscapes

A. STREET TYPES

The hospital triangle planning area is bounded by major avenues on its southwest and north edges – Main Street on the southwest and Loma Vista Road on the north – and by an important local connector street, Brent, on the east. The Hospital District Master Plan envisions a phased transformation of these streets to support the City’s vision for the Midtown area, and the goals of the Plan.

Because the nature of the Plan area is a mixed use and walkable environment, a robust network of very walkable streets is necessary to reduce congestion, provide emergency access, encourage pedestrian activity, support existing and future transit ridership, provide valuable new addresses for mixed-use development, and both increase and leverage a finite parking supply. Accordingly, it is very important that these streets be designed to moderate vehicular speeds for improved pedestrian comfort and safety.

The Hospital District’s street and open space network:

1. Consists of streets that physically and spatially define and frame the blocks;
2. Is hierarchical, composing blocks sized for pedestrian use and defined by various street types, whose widths are calibrated for compatibility with the range of building types and uses that each is meant to service. A larger-than-normal block is provided for the hospital itself, due to its size and special programmatic needs for internal connectivity and security;
3. Is lean, using the minimum vehicular width practical for each thoroughfare;
4. Is interconnected, providing for a variety of alternative paths of movement;
5. Is spatially conceived and designed, with carefully calibrated standards for each thoroughfare and for the buildings that enfront it to establish an appropriate sense of enclosure and to contribute to the character and place within each portion of the Plan Area;
6. Is varied, as individual thoroughfares provide for scale, character and intensity transitions between the several blocks within the Plan area; and
7. Features strategically located shifts in geometry and physical character, which coincide with the particular role and design speed of the associated streets. This effectively calms traffic without the need for post-construction

interventions, and enhances the sense of place through unique positioning of buildings at these transitions.

For each street type used in the Plan Area, the corresponding standards in Figure 4 (Street Types Plan), prescribe a geometric profile as well as performance characteristics to implement the above characteristics. The image and performance of thoroughfares becomes a powerful influence on the design of buildings within adjacent blocks and on the overall quality of life within the district and adjacent neighborhoods.

Based on the policies in this chapter and the vision set forth in the CMH District Master Plan, the diagrams to follow, identify both the existing streets and modifications as well as new or realigned streets. The final street sections shall be subject to review and approval of the City Engineer.

Figure 4 Street Types Plan

	Specific Street Type	R.O.W.	Paved Width		Specific Street Type	R.O.W.	Paved Width
1	Loma Vista Drive	80'	56'	5c	Cabrillo Drive - C	76'	56'
2	Main Street	85'	57'	6	Hospital Way	64	36'
3	Borchard Drive	60'	40'	7a	Access and Parking Alley - A	20'	40'
4	Brent Street	60'	40'	7b	Access and Parking Alley - B	20'	46'
5a	Cabrillo Drive - A	64'	36'	7c	Access and Parking Alley - C	20'	20'
5b	Cabrillo Drive - B	46'	46'				

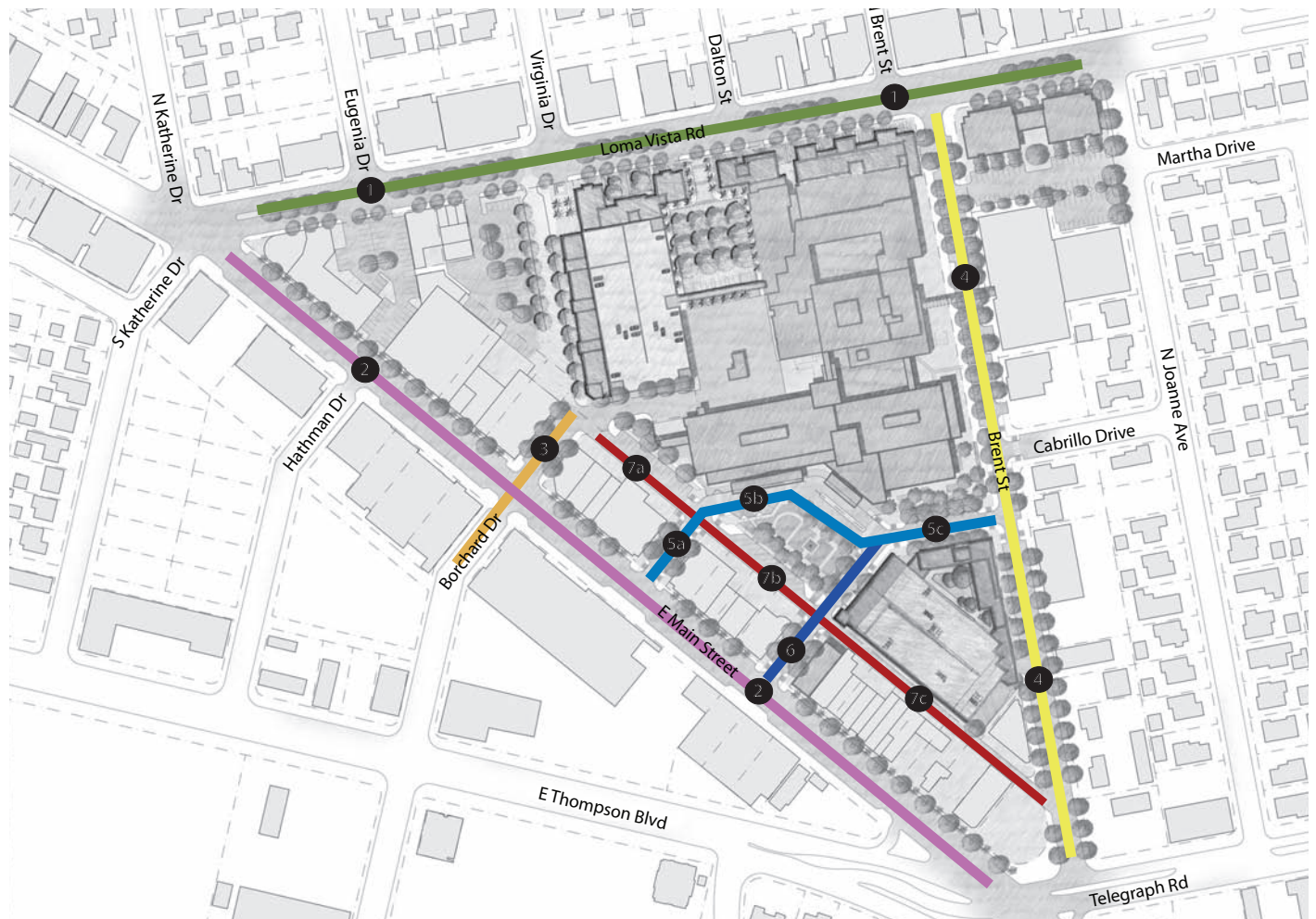
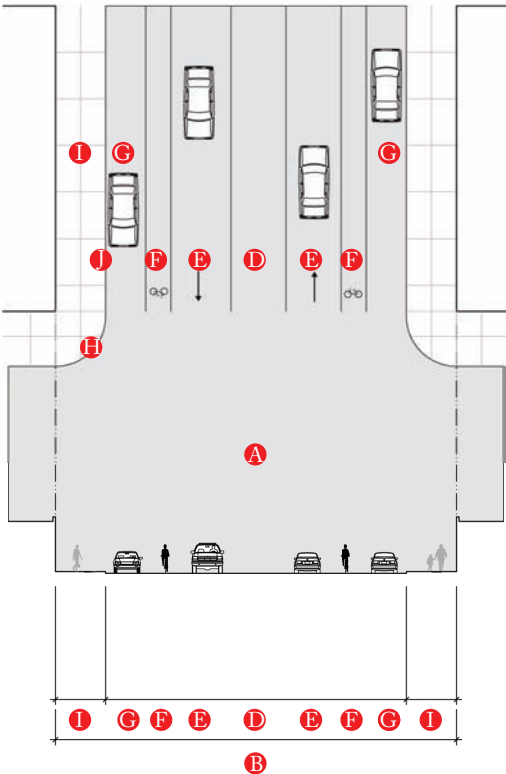
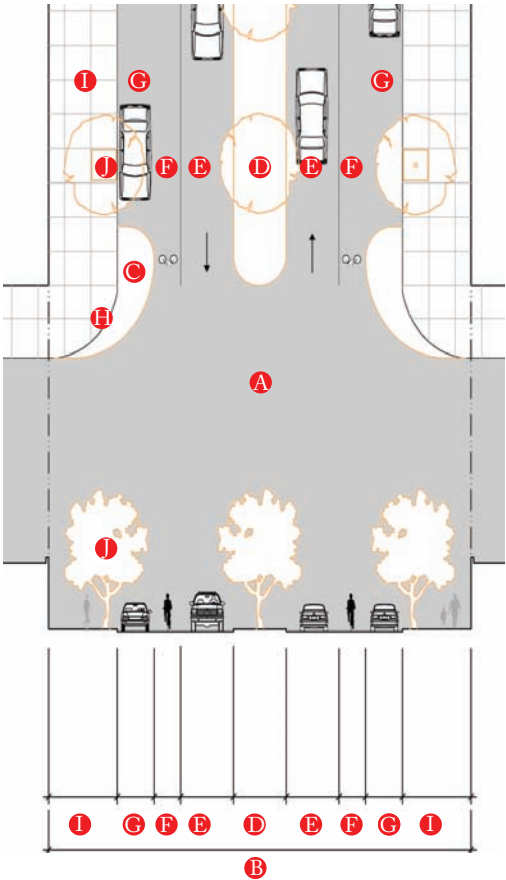


Figure 5-1 Loma Vista Road Street Section

1 Loma Vista Road: 80' ROW, 56' Paved width



Existing Conditions



Proposed Section



Existing conditions on Loma Vista Road

Description of Proposed Changes:

Proposed changes to Loma Vista Road include include the addition of a planted median in portions of the existing left-turn lane, and the addition of end-of-block bulbouts. The benefit of end-of-block bulbouts are twofold: clearly defining the limits of on-street parallel parking and reducing the percieved street width which generally reduces vehicular speed, thereby increasing pedestrian safety.

Key		Existing	Proposed
A	Movement	Free	Free
B	Right of Way (ft)	80'	80'
C	Bulbouts	None	End of block
D	Median	None	10'
E	Traffic Lanes	2 at 12'	2 at 10'
F	Bike Lanes	2; 6' each	2; 5' each
G	Parking	8'; parallel	8'; parallel
H	Curb Radius	10'	10' (w\out bulb-outs)
I	Sidewalk	8'	12'
J	Planter Size	3' x 3'	5' x 5'
Additional Information for Proposed Changes:			
Speed (mph)		25	
Planter Type		Planters at 25' on center	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		14' tall poles at 50' on center	

Figure 5-2 Main Street Section

2 Main Street: 85' ROW, 57' Paved width

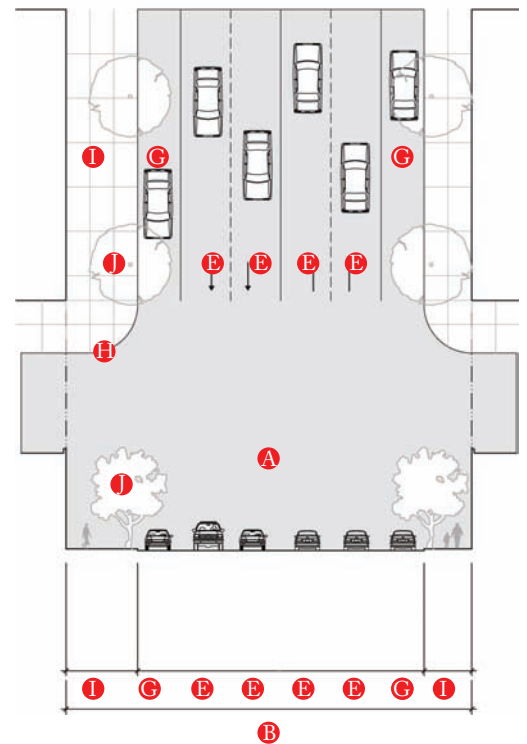


Existing conditions on Main Street

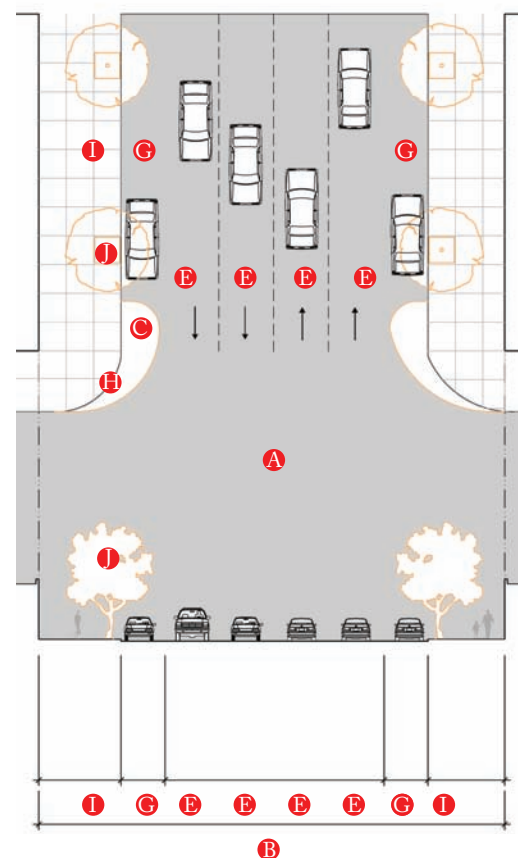
Description of Proposed Changes:

Changes to Main Street include the construction of end-of-block bulbouts as well as tree planters within the parallel parking lanes. The benefits of this design solution include: widening the effective sidewalk width without the expense of moving curbs, as well as reduced vehicular speeds due to a reduction in perceived street width.

Key		Existing	Proposed
A	Movement	Free	Free
B	Right of Way (ft)	85'	85'
C	Bulbouts	None	End of block
D	Median	None	None
E	Traffic Lanes	4 at 10'-6"	4 at 10'
F	Bike Lanes	None	None
G	Parking	8'; parallel	8'; parallel
H	Curb Radius	10'	10' (w/out bulb-outs)
I	Sidewalk	10';15' (south side)	14'
J	Planter Size	2' x 4'	5' x 5'
Additional Information for Proposed Changes:			
Speed (mph)		30	
Planter Type		Planters at 25' on center	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		14' tall poles at 50' on center	



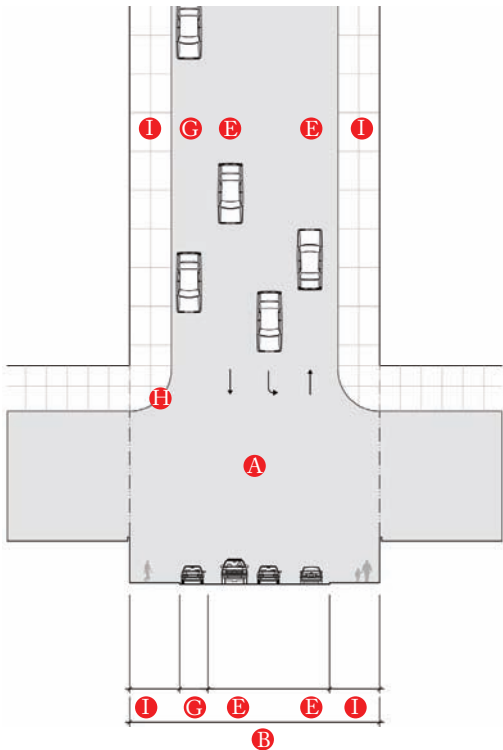
Existing Conditions



Proposed Section

Figure 5-3 Borchard Drive Street Section

3 Borchard Drive: 60' ROW, 40' Paved width



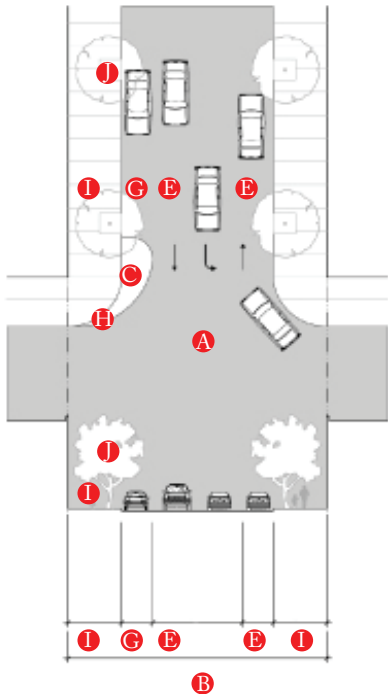
Existing Conditions



Existing conditions on Borchard Drive

Description of Proposed Changes:

Changes to Borchard Drive are subtle, but important. The construction of end-of-block bulbouts reduces the perceived street width and protects parked cars from the incoming traffic turning right onto Borchard Drive from Main Street. The addition of tree planters creates shade for the on-street parking spaces and sidewalks, and spatially defines and adds character to the street, which is envisioned as an important cross street from Thompson Boulevard to Main Street and to Loma Vista Road.



Proposed Section

Key		Existing	Proposed
A	Movement	Free	Free
B	Right of Way (ft)	60'	60'
C	Bulbouts	None	North side only
D	Median	None	None
E	Traffic Lanes	2 at 10'; left-turn lane	2 at 10'; left-turn lane; right-turn lane
F	Bike Lanes	None	None
G	Parking	8'; parallel, north side	8'; parallel, north side
H	Curb Radius	10'	15' (with bulb-outs)
I	Sidewalk	10'	10'
J	Planter Size	None	5' x 5'
Additional Information for Proposed Changes:			
Speed (mph)		25	
Planter Type		Planters at 25' on center	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		14' tall poles at 50' on center	

Figure 5-4 Brent Street Section

4 Brent Street: 60' ROW, 40' Paved width

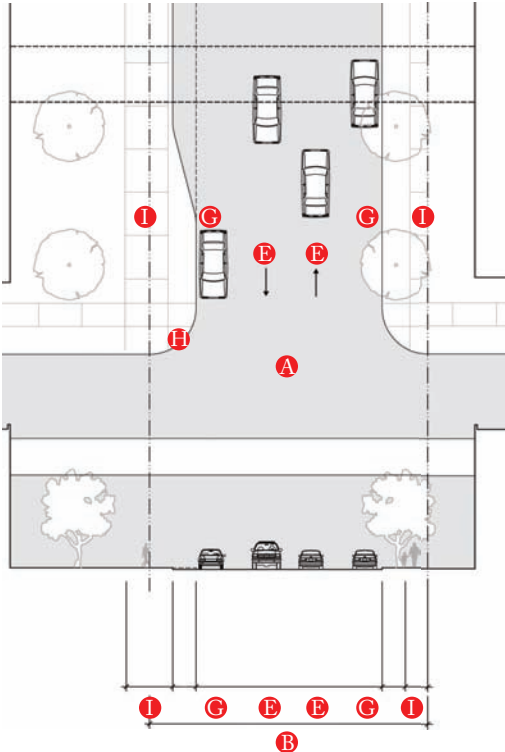


Existing conditions on Brent Street

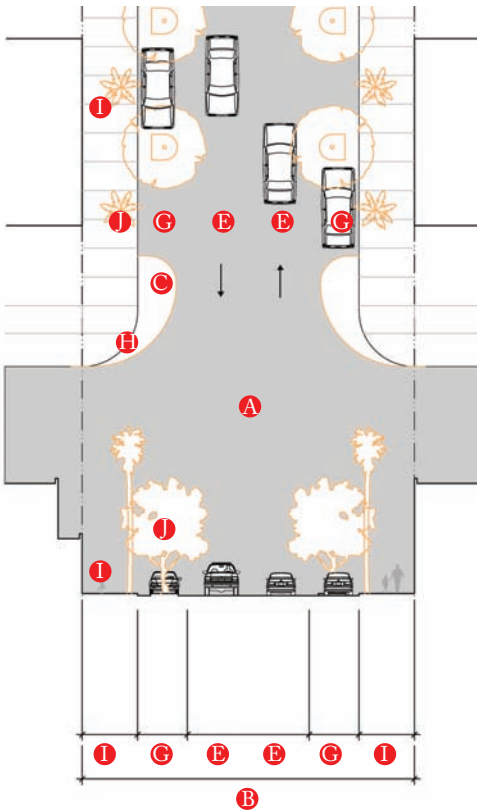
Description of Proposed Changes:

Similar to Main Street, parking lane tree planters and end-of-block bulb-outs are proposed along the east side of Brent Street. The west side of Brent Street has no bulb-outs or in-street planters to maintain a cleared ambulance drop-off / loading zone for the existing hospital tower.

Key		Existing	Proposed
A	Movement	Free	Free
B	Right of Way (ft)	60'	60'
C	Bulbouts	None	56' on center
D	Median	None	None
E	Traffic Lanes	2 at 11'	2 at 11'
F	Bike Lanes	None	None
F	Parking	9'; parallel	9'; parallel
G	Curb Radius	10'	10' (no bulb-outs in drop-off zone)
Sidewalk		10'	10'
I	Planter Size	None	5' x 5'
Additional Information for Proposed Changes:			
Speed (mph)		30	
Planter Type		Planters at 25' on center	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		14' tall poles at 50' on center	



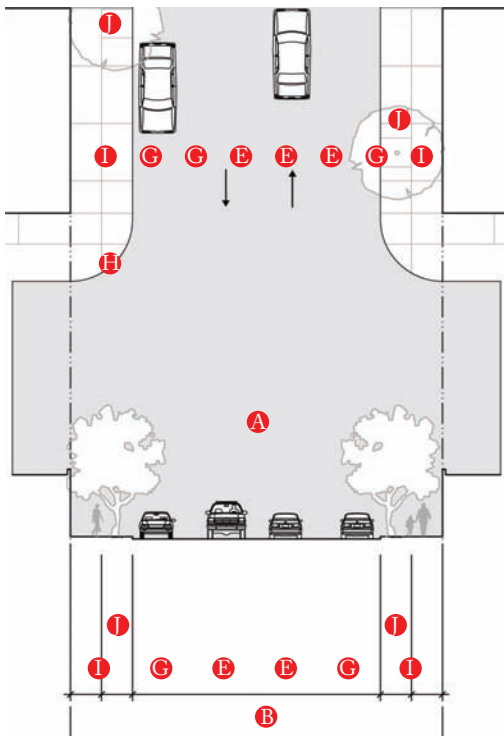
Existing Conditions



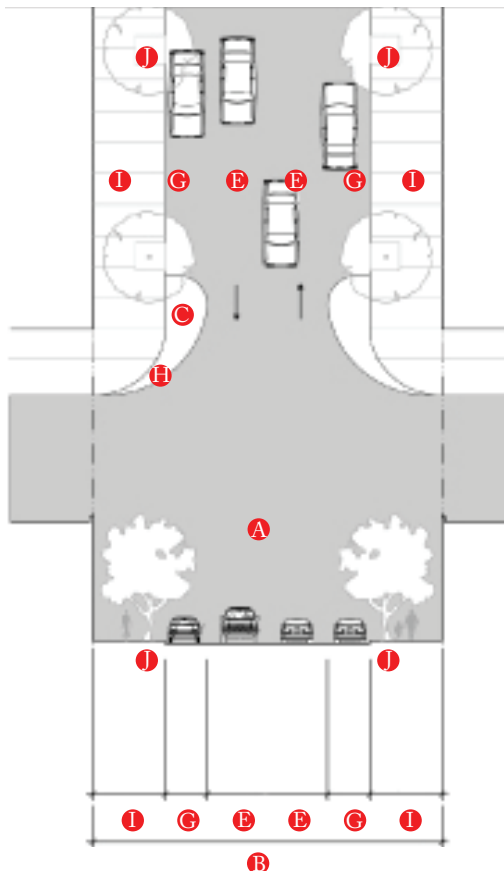
Proposed Section

Figure 5a Cabrillo Drive Street Section

5a Cabrillo Drive A: 64' ROW, 36' Paved width



Existing Conditions



Proposed Section



Existing conditions on Cabrillo Drive

Description of Proposed Changes:

Changes to Cabrillo Drive "A" (formerly the Cabrillo Drive entrance to the Plan Area) include increasing the sidewalk widths from 10' to 14', thereby decreasing the street width to 36', and the construction of regularized tree-planters. To accommodate this, the existing right-of-way will be increased to 64' by moving the existing property line on the parcel adjacent to the east side of the street by 4' at the time or redevelopment of that property. Also at this time, the curb on the east side of the street will be moved to extend the sidewalk to 14', and decrease the overall street width to 36'.

Key	Existing	Proposed
A Movement	Slow	Slow
B Right of Way (ft)	60'	64'
C Bulbouts	None	End of block
D Median	None	None
E Traffic Lanes	2 at 12'	2 at 10'
F Bike Lanes	None	None
G Parking	8'; parallel	8'; parallel
H Curb Radius	10'	10' (w/out bulb-outs)
I Sidewalk	10'	14'
J Planter Size	None	5' x 5'

Additional Information for Proposed Changes:

Speed (mph)	25
Planter Type	Planters at 25' on center
Tree Species	Refer to Figure 4 (Streetscape Types)
Street Lighting	14' tall poles at 50' on center

Figure 5b Cabrillo Drive Street Section

5b Cabrillo Drive B: 46' ROW, 46 Paved width



Existing conditions on Cabrillo Drive

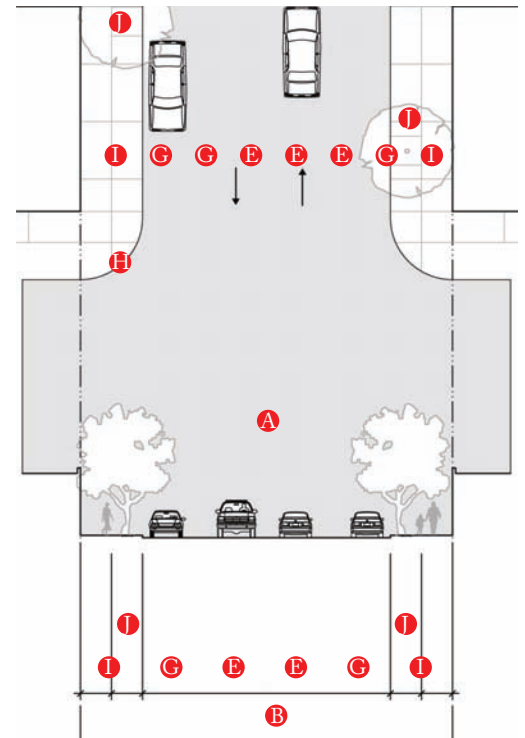
Description of Proposed Changes:

Cabrillo Drive “B” fronts the new plaza in front of the new Hospital building. To accommodate and welcome hospital visitors, diagonal parking is incorporated into the Cabrillo Drive right-of-way.

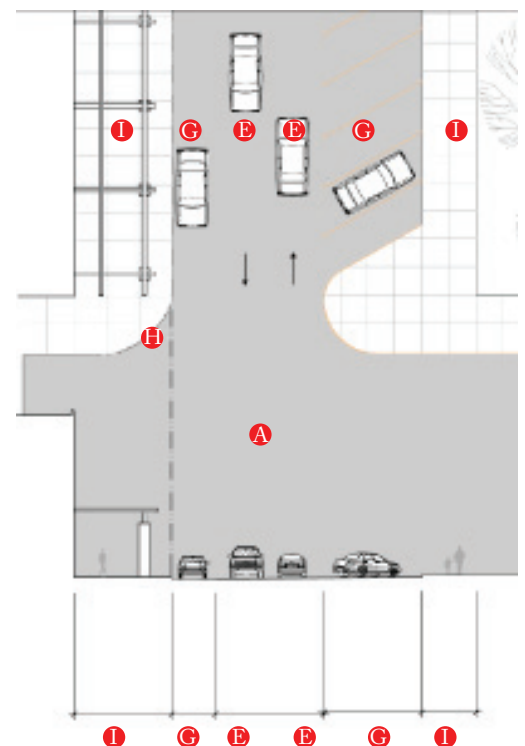
Key	Existing	Proposed
A Movement	Slow	Slow
B Right of Way (ft)	60'	N/A
C Bulbouts	None	Plaza side only
D Median	None	None
E Traffic Lanes	2 at 12'	2 at 10'
F Bike Lanes	None	None
G Parking	8'; parallel	8'; parallel (CMH side) 18'; diagonal (plaza side)
H Curb Radius	10'	15'
I Sidewalk	10'	16.5' gallery (CMH side) 6.5' (plaza side)
J Planter Size	None	5' x 5'

Additional Information for Proposed Changes:

Speed (mph)	20-25
Planter Type	Planters at 25' on center on plaza side
Tree Species	Refer to Figure 4 (Streetscape Types)
Street Lighting	14' tall poles at 50' on center



Existing Conditions



Proposed Section

Figure 5c Cabrillo Drive Street Section

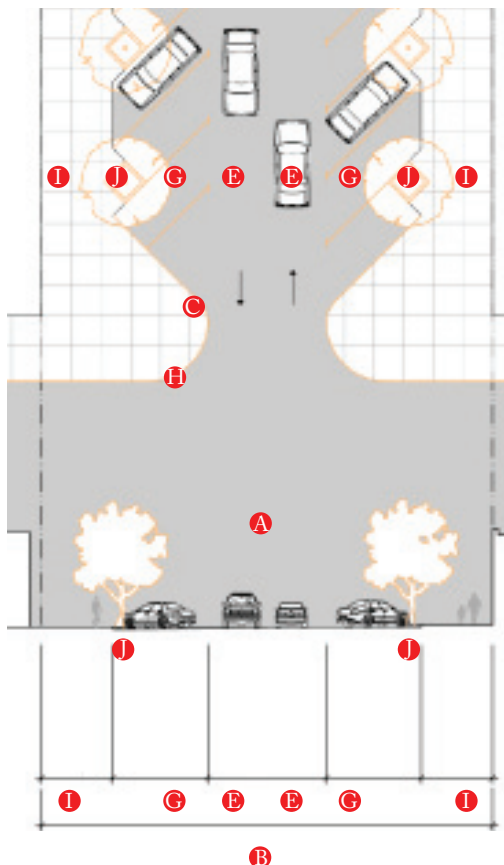
5a Cabrillo Drive C: 76' ROW, 56' Paved width



Existing conditions on Cabrillo Drive

Description of Proposed Changes:

Cabrillo Drive “C” is a newly constructed street, paralleling but southerly of the vacated Cabrillo Drive, making way for the new hospital construction. Cabrillo Drive “C” becomes a primary entrance to the Hospital District from Brent Street, and is distinguished by diagonal parking on both sides of the street, as well as tree planters constructed in the unusable area of the diagonal parking stalls to maximize the amount of usable sidewalk space.



Key		Existing	Proposed
A	Movement	N/A	Slow
B	Right of Way (ft)	N/A	76'
C	Bulbouts	N/A	End of block
D	Median	N/A	None
E	Traffic Lanes	N/A	2 at 10'
F	Bike Lanes	N/A	None
G	Parking	N/A	18' diagonal, both sides
H	Curb Radius	N/A	15'
I	Sidewalk	N/A	10'
J	Planter Size	N/A	5' x 5'
Additional Information for Proposed Changes:			
Speed (mph)		20-25	
Planter Type		Planters aligned with parking stalls, and spaced every second parking stall.	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		14' tall poles at 50' on center	

Proposed Section

Figure 6 Hospital Way Street Section

6 Hospital Way (New Street): 64' ROW, 36' Paved width

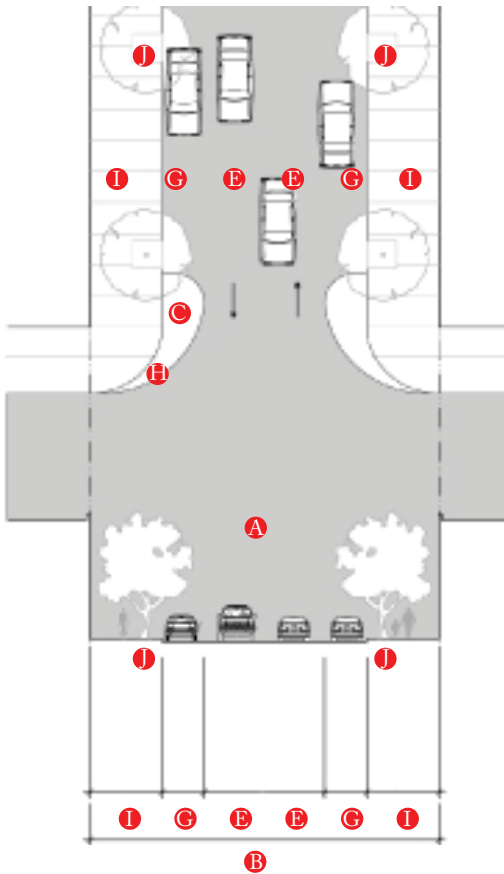


Existing conditions on Main Street/Hospital Way

Description of Proposed Changes:

Hospital Way is a new entrance to the Hospital District connecting Main Street to Cabrillo Drive, while providing an easy in-and-out loop for emergency vehicles to access the new hospital building. Hospital Way will be constructed through a property currently owned by CMH. CMH will construct the new street.

Key		Existing	Proposed
A	Movement	N/A	Slow
B	Right of Way (ft)	N/A	64'
C	Bulbouts	N/A	End of block
D	Median	N/A	None
E	Traffic Lanes	N/A	2 at 10'
F	Bike Lanes	N/A	None
G	Parking	N/A	8'; parallel
H	Curb Radius	N/A	10' (w\out bulbouts)
I	Sidewalk	N/A	14'
J	Planter Size	N/A	5' x 5'
Additional Information for Proposed Changes:			
Speed (mph)		25	
Planter Type		Planters at 25' on center	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		14' tall poles at 50' on center	



Proposed Section

Figure 7a Access and Parking Alley Section

7a Access and Parking Alley A: 20' ROW, 40' Paved width

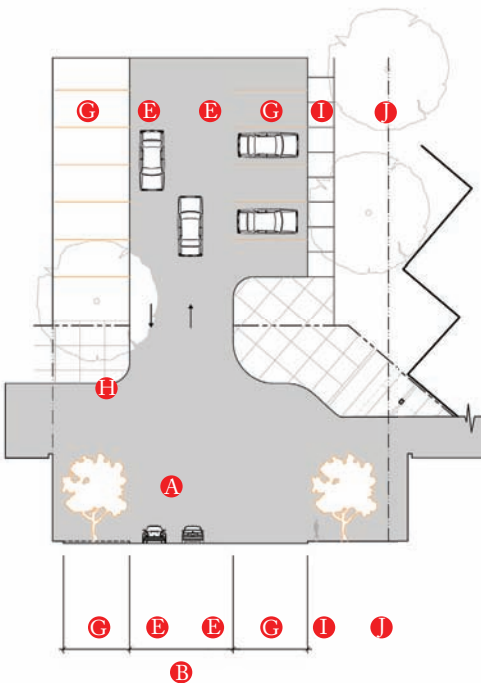
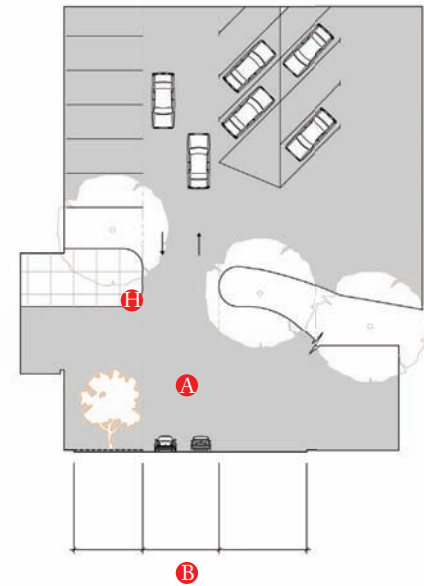


Existing conditions on Service Alley

Description of Proposed Changes:

The Service Alley running parallel to Main Street in the Hospital District takes on multiple forms and characters, as is functionally necessary and appropriate. In Condition “7A”, between Borchard Drive and the Cabrillo Drive, 90 degree parking is added to both sides, effectively maintaining the existing parking lot which currently serves an existing restaurant, as well as adjacent businesses on Main Street.

Existing Conditions



Key		Existing	Proposed
A	Movement	Slow	Slow
B	Right of Way (ft)	20'	20'
C	Bulbouts	None	None
D	Median	None	None
E	Traffic Lanes	N/A	2 at 10'
F	Bike Lanes	None	None
G	Parking	Currently serves as a parking lot	20' head-in (CMH side) 20' Optional (opposite side)
H	Curb Radius	10'	10'
I	Sidewalk	None	6.5' (CMH side)
J	Planter Size	None	Varied

Additional Information for Proposed Changes:

Speed (mph)	15-20
Planter Type	Varied
Tree Species	Refer to Figure 4 (Streetscape Types)
Street Lighting	On adjacent buildings (14' minimum vertical clearance) poles at 50' on center

Proposed Section

Figure 7b Access and Parking Alley Street Section

7b Access and Parking Alley B: 20' ROW, 46' Paved width

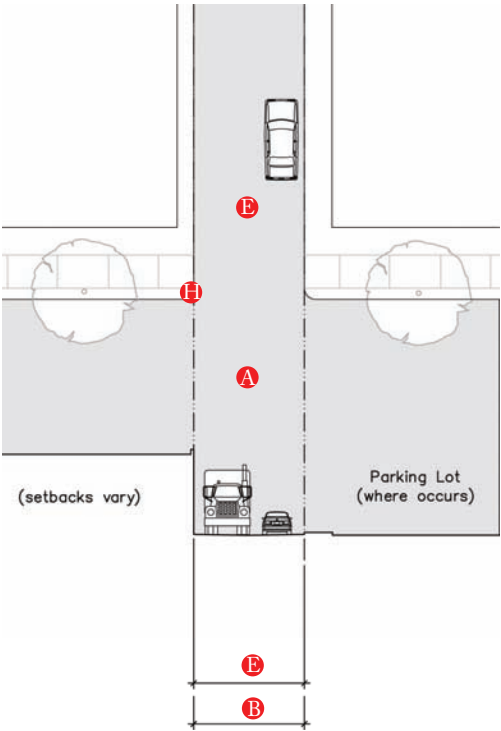


Existing conditions on Service Alley

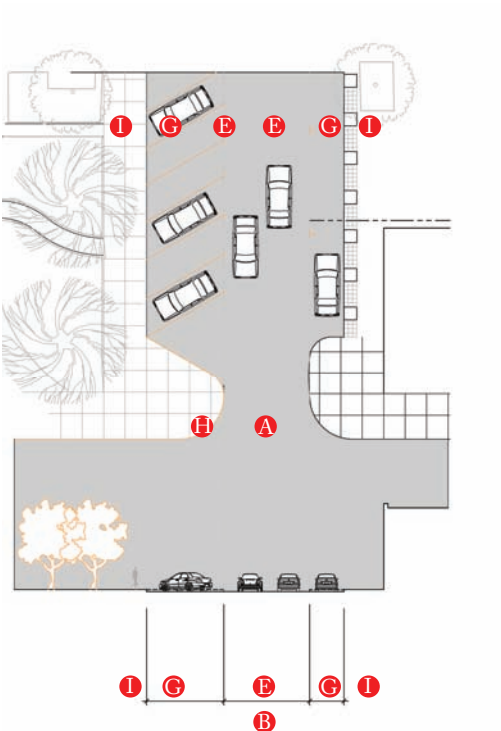
Description of Proposed Changes:

Condition “7B” adds parallel parking along the edge of the new public plaza. Additionally, the paving material for this portion of the alley should have a special character that extends the hardscape of the plaza to new courts of the Main Street buildings, such that, during non-service hours, the function of the service alley could be transformed into public realm, and could be used as outdoor dining space, additional parking for special events, etc.

Key		Existing	Proposed
A	Movement	Slow	Slow
B	Right of Way (ft)	20'	20'
C	Bulbouts	None	End of block (plaza side)
D	Median	None	None
E	Traffic Lanes	2 at 10'	2 at 10'
F	Bike Lanes	None	None
G	Parking	None	18' diagonal (plaza side); 8' parallel (opposite side)
H	Curb Radius	10'	10'
I	Sidewalk	None	Per plaza design
J	Planter Size	None	Varied planting
Additional Information for Proposed Changes:			
Speed (mph)		15-20	
Planter Type		Varied	
Tree Species		Refer to Figure 4 (Streetscape Types)	
Street Lighting		On adjacent buildings (14' minimum vertical clearance)	



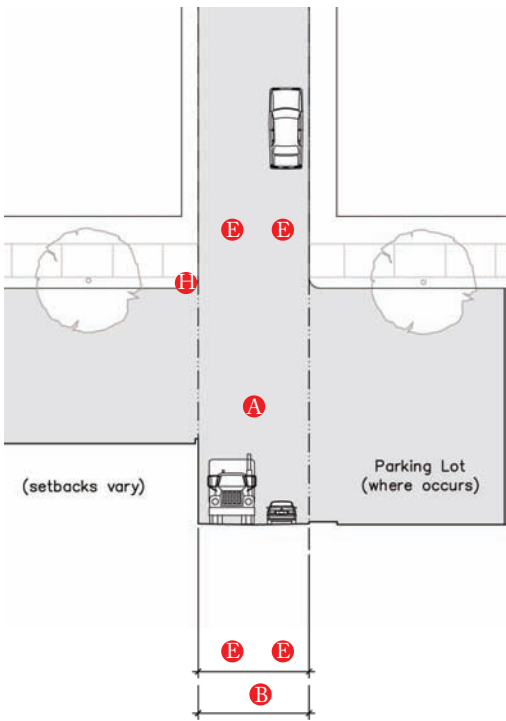
Existing Conditions



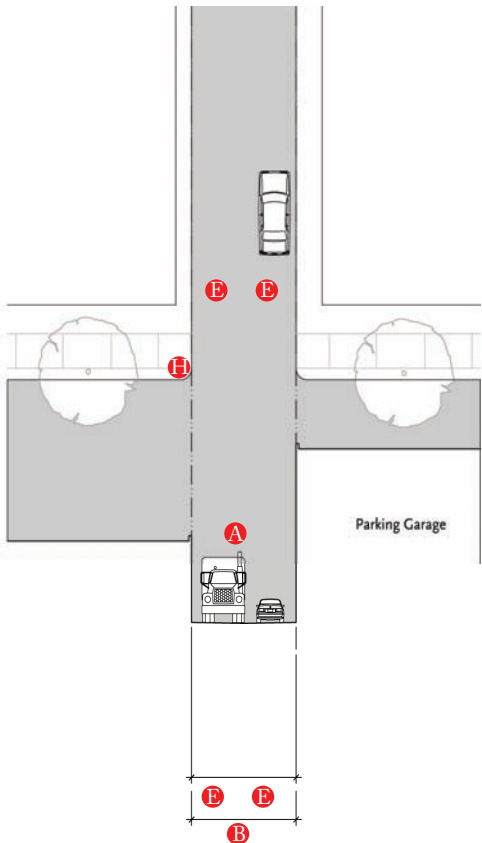
Proposed Section

Figure 7c Access and Parking Alley Section

7c Access and Parking Alley C: 20' ROW, 20' Paved width



Existing Conditions



Proposed Section



Existing conditions on Service Alley

Description of Proposed Changes:

Condition “C” of the service alley receives little, to no changes at all. Its primary function will be access to the proposed parking structure that is to be constructed at a yet to be determined point in the future of the project. Until the time of construction, Service Alley “C” will continue to serve the existing Main Street-adjacent buildings, the existing surface parking lot, and may be a primary access for loading and unloading of materials, construction staging, or any other trips associated with the construction of the new hospital.

Key		Existing	Proposed
A	Movement	Slow	Slow
B	Right of Way (ft)	20'	20'
C	Bulbouts	None	End of block
D	Median	None	None
E	Traffic Lanes	2 at 10'	2 at 10'
F	Bike Lanes	None	None
G	Parking	None	None
H	Curb Radius	10'	10'
I	Sidewalk	None	None
J	Planter Size	None	None
Additional Information for Proposed Changes:			
Speed (mph)		15-20	
Planter Type		N/A	
Tree Species		N/A	
Street Lighting		On adjacent buildings (14' minimum vertical clearance) poles at 50' on center	

24SD-H1.203

LAND USES

24SD:H1.203.010 Purpose

This Section identifies the land use types allowed in each zone established by the Regulating Plan and determines the type of City approval required for each use.

24SD:H1.203.030 Applicability

A lot or building shall be occupied by only the land uses allowed by Table 2 within the zone applied to the site by the Regulating Plan. Each land use listed in Table 2 is defined in Section 24SD:H1.300 (Glossary).

24SD:H1.203.030 Land Use Tables

A. ALLOWED LAND USES.

1. Establishment of an allowed use. Any one or more land uses identified by Table 2 as being allowed within a specific zone may be established on any lot within that zone, subject to the planning permit requirement listed in the Table 2, and in compliance with all applicable requirements of this Development Code.
2. Use not listed.
 - a. A land use that is not listed in Table 2, and is determined by the Director to not be included in Section 24SD:H1.300 (Glossary) under the definition of a listed land use, is not allowed, except as otherwise provided in Subsection A.3.
 - b. A land use that is listed in Table 2, but not within a particular zone is not allowed within that zone, except as otherwise provided in Subsection A.3.
3. Similar and compatible use may be allowed. The Director may determine that a proposed use not listed in Table 2 is allowable in compliance with the procedure in Zoning Ordinance Chapter 24.115.130.
4. Permit requirements and development standards. When the Director determines that a proposed, but unlisted, use

is similar to a listed use, the proposed use will be treated in the same manner as the listed use in determining where it is allowed, what permits are required, and what other standards and requirements of this Development Code apply.

5. Temporary uses. Temporary uses are allowed in compliance with the Temporary Use Permit requirements of the Zoning Ordinance.

B. PERMIT REQUIREMENTS.

Table 2 provides for land uses that are:

1. Permitted subject to compliance with all applicable provisions of this Development Code. These are shown as “P” uses in the table;
2. Allowed subject to the approval of a Use Permit (Zoning Ordinance Chapter 24.520), and shown as “UP” uses in the table;
3. Not allowed in particular zones, and shown as a “—” in the table.

C. STANDARDS FOR SPECIFIC LAND USES AND ADDITIONAL CITY APPROVAL REQUIREMENTS.

Where the last column in Table 2 (“Additional Regulations”) includes a Section number, the regulation in the referenced section also applies to the use. Additional requirements from other sections of this Development Code or the Zoning Ordinance may also apply at the discretion of the Planning Director.

Table 2: Land Use

Land Use Types (1)	P	Permitted Uses	
	UP	Use Permit Required	
	—	Not Allowed	
	Pemit Required by Zone		Additonal Regulations
	SD:H1	P&OS	
Hospital			
General hospital	P(2)	—	
Helicopter landing services	UP	—	
Ambulance services (medical equipment, supplies)	UP	—	
Industry, Manufacturing, Processing, & Wholesaling			
Laboratory (medical, analytical)	P(3)	—	
Printing and publishing	P(3)	—	
Research and development	P	—	
Recreation, Education, & Public Safety			
Adult business	—	—	
Community meeting facility	P	P	ZO 24.480
Health/fitness facility/indoor sports & recreation	P	—	
Library, museum	P	—	
Public parks and playgrounds	P	P	
School (public or private)	UP	—	
Studio (art, dance, martial arts, music)	P	—	
Residential			
Dwelling (multi-unit)	P	—	
Dwelling (accessory, carriage house)	—	—	
Dwelling (single-dwelling)	—	—	
Home occupation	P	—	
Live/work	P	—	
Special residence	P	—	
Retail			
Bar, tavern, night club	UP	—	ZO.24 460
Gas station	—	—	
General Retail, except with any of the following features:	P	—	
Alcoholic beverage sales	UP	—	ZO.24.460
Auto- or motor-vehicle related sales or services	—	—	
Drive-through facilities	—	—	
Floor area over 20,000 square feet	—	—	
Restaurant	P	—	
SD:H1	Hospital District Zone		
	P&OS		
	Parks & Open Space Zone		
Notes			
1	Definition of land uses are listed in Section 24SD:H1.300.		
2	Excluding sanitariums, nursing homes, convalescent homes, maternity homes, or rest homes.		
3	Use not allowed on ground floor where Frontage Overlays occur (see regulating plan, Section 24SD: H1.102).		
4	Use permit as may be required by Zoning Ordinance (ZO 24.497).		

Table 2: Land Use (continued)

Land Use Types (1)	P Permitted Uses		
	UP Use Permit Required		
	— Not Allowed		
	Pemit Required by Zone		Additonal Regulations
	SD:H1	P&OS	

Services – Business, Financial, Professional

Bank, financial services	P	—	
Business support service	P	—	
Medical/Dental	P	—	
Office	P	—	

Services – General

Catering service	P (3)	—	
Day care	P	—	
Drive-through service	—	—	
Lodging	P	—	
Mortuary, funeral home	—	—	
Personal service	P	—	
Safety service	P	—	

Transportation, Communications, Infrastructure

Helicopter landing Service	UP	—	
Parking facility (public or commercial)	P	—	
Wireless telecommunications facility	P	—	ZO 24.497 (4)
Transit station or terminal	P	—	
Utility or equipment substation	P	—	

Parks and Open Space

Outdoor dining	P	P	
Outdoor sports/recreation facilities	—	UP (4)	
Outdoor entertainment	—	UP (4)	
Farmer's market	UP	UP (4)	

SD:H1 Hospital District Zone P&OS Parks & Open Space Zone

- Notes**
- 1 Definition of land uses are listed in Section 24SD:H1.300.
 - 2 Excluding sanitariums, nursing homes, convalescent homes, maternity homes, or rest homes.
 - 3 Use not allowed on ground floor where Frontage Overlays occur (see regulating plan, Section 24SD: H1.102).
 - 4 Use permit as may be required by Zoning Ordinance (ZO 24.497).

24SD-H1.204

FRONTAGE TYPE STANDARDS

24SD:H1.204.010 Purpose and Applicability

A. PURPOSE.

This Section identifies the frontage types allowed within the Hospital District Area, and provides design standards for each type, to ensure that proposed development relates to its frontage as necessary to appropriately form the public realm.

B. APPLICABILITY.

Each proposed building shall be designed to incorporate a frontage type designed in compliance with the standards of this Section for the applicable type, except for public and institutional buildings, which because of their unique disposition and application are not required to comply with frontage type requirements.

C. ALLOWABLE FRONTAGE TYPES BY ZONE.

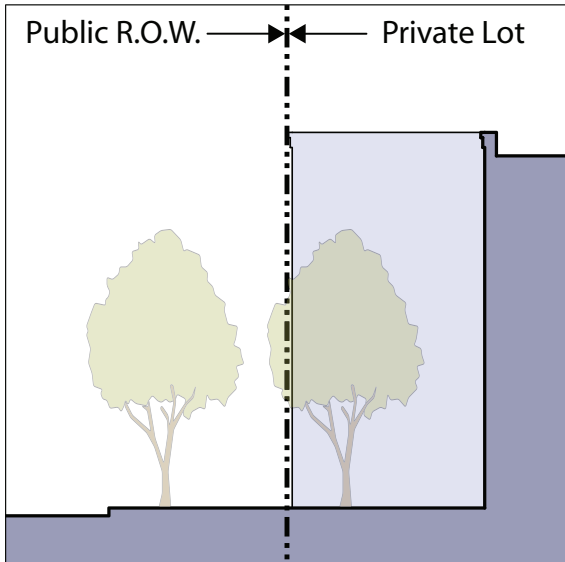
A lot may be developed only with a building having a frontage type allowed per Section 24SD:H1.200.020.

24SD:H1.204.012 Frontage Summary and Definitions

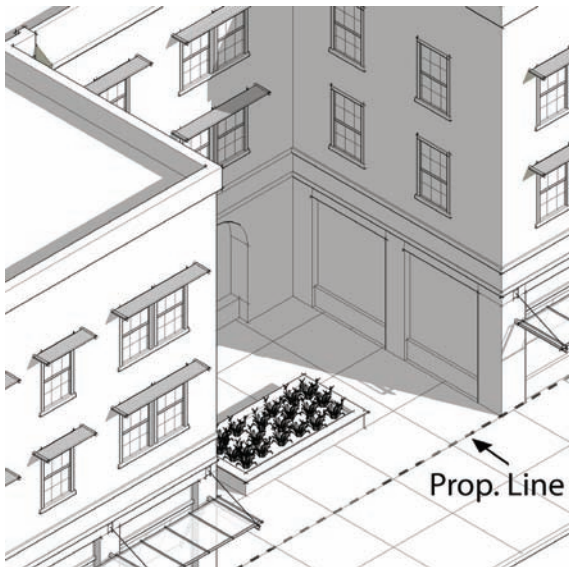
The character and arrangement of the individual private frontages that collectively shape the public realm, are regulated by the Frontage Type Standards herein. These standards shall be applied to create a particular and appropriate transitional relationship between the private and public realm, and collectively define the nature of the streetscape. Frontage types are required, where indicated by the Frontage Overlay described in the Regulating Plan - Figure 1.

Frontage types represent a variety of extensions of the basic façade of the building. While a range of frontage types is permitted, the actual choice and review of a type shall be dictated by individual building designs and, ultimately, the Design Review Committee's discretion.

Primary access to buildings, in all cases, shall be via the designated frontage type. Primary access shall be designated specifically for pedestrian access to buildings, where car and delivery access shall be served by secondary access points not necessarily requiring a specified frontage type.



Section Diagram



Axonometric Diagram



Illustrative Photograph

24SD:H1.204.020 Forecourt

A. DESCRIPTION.

Forecourts are uncovered courts within a shopfront, gallery or arcade frontage, wherein a portion of the facade is recessed from the building frontage. The court is suitable for outdoor dining, gardens, vehicular drop-offs, and utility off-loading. A fence or wall at the property line may be used to define the private space of the court. The court may also be raised from the sidewalk, creating a small retaining wall at the property line with entry steps to the court. This type should be used sparingly and in conjunction with Stoops and Shopfronts.

B. DESIGN STANDARDS.

1. Depth (distance from r.o.w.): 10' deep minimum (clear) and 30' deep maximum (clear)
2. Width (distance parallel to r.o.w.): 10' wide minimum and 50' wide maximum or 50% of lot width, whichever is less.
3. Forecourts between 10' and 15' in depth shall be substantially paved, and enhanced with landscaping. Forecourts between 15' and 30' in depth shall be designed with a balanced use of paving and landscaping.
4. A one-story fence or wall (up to 8' tall) at the property line may be used to define the private space of the court.
5. If the forecourt is raised above the adjacent grade, it should not be more than 3' above the grade of the sidewalk.



Illustrative Photograph

24SD:H1.204.030 Shopfront and Awning

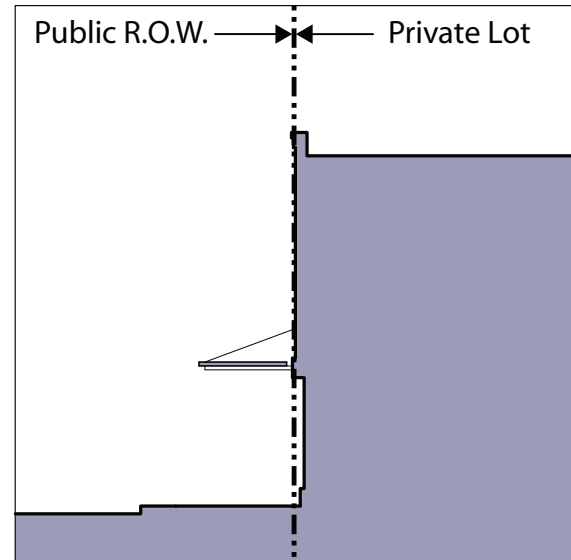
A. DESCRIPTION.

Typically, the Shopfront & Awning frontage type applies to storefronts. Storefronts are facades placed at or close to the right-of way line, with the entrance at sidewalk grade. They are conventional for retail frontage and are commonly equipped with cantilevered shed roof(s) or awning(s). Recessed storefronts are also acceptable. The absence of a raised ground floor precludes residential use on the ground floor facing the street. Residential use would be appropriate above the ground floor and behind another use that fronts the street.

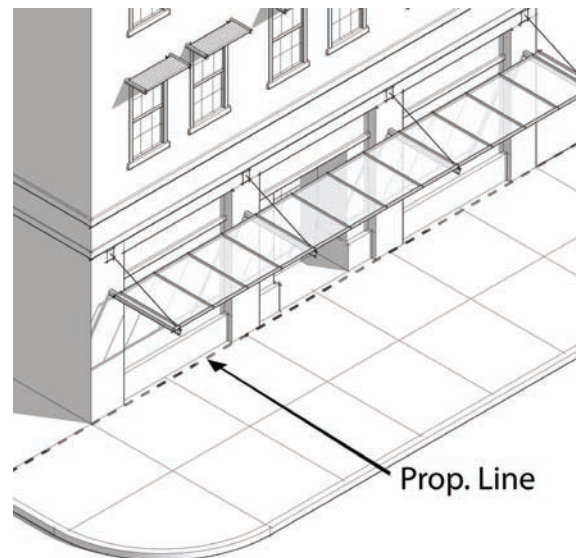
B. DESIGN STANDARDS

Storefronts are like small buildings with their own base, “roofline”, and pattern of window and door openings.

1. Storefronts shall be at least 10’ tall, as measured from the adjacent walk.
2. Storefront assemblies (the doors, display windows, bulkheads and associated framing) should not be set back into the Shopfront openings more than 2’ maximum, so that passing pedestrians have a clear view of the shop interior.
3. Storefronts may be set back from the r.o.w. up to 12’, but not less than 8’, for up to 25’ of the building frontage in order to create a covered alcove, in which outdoor dining or merchandising can occur within the volume of the building.
4. Base: A panel of tile or other special material is recommended below display windows. Materials recommended for walls are generally suitable. Base materials should visually be the same or “heavier” materials than walls.
 - a. Brick and wood should only be used if the rest of the wall surface is the same material; neither material should be used exclusively.
 - b. Ceramic tile is frequently used as a storefront base. Dark tile with light stucco is an effective combination. Different colors and sizes of tile may be used for decorative effect.
5. Display windows: The corresponding storefront(s) opening(s) along the primary frontage shall be at least 65% of the first floor wall area, and not have opaque or reflective glazing. Where privacy is desired for restaurants and professional services, etc., windows should be divided into smaller panes, and partial curtains may be used at diner eye-level.



Section Diagram



Axonometric Diagram



Illustrative Photograph



Illustrative Photograph



Illustrative Photograph



Illustrative Photograph

6. A physical transition shall be provided between the glazing of the storefront and the grade except if the glazing itself terminates directly at the grade. Where a bulkhead is to transition between the opening(s) and the adjacent grade, the bulkhead shall be between 10 to 36 inches tall (aluminum storefront panel or spandrel panel may not substitute for bulkhead).
7. Clerestory windows are horizontal panels of glass between the storefront and the second floor. They are a traditional element of "main street" buildings, and are recommended for all new or renovated storefronts. Clerestory windows can be good locations for neon, painted-window and other relatively non-obtrusive types of signs.
8. Recessed Entries are recommended as another traditional element of the main street storefront. Recommended treatments include:
 - a. Special paving materials such as ceramic tile;
 - b. Ornamental ceilings such as coffering; and
 - c. Decorative light fixtures.
9. Doors should be substantial and well detailed. They are the one part of the storefront that patrons will invariably touch and feel. They should match the materials, design and character of the display window framing. "Narrowline" aluminum framed doors are not allowed.
10. Cornices should be provided at the second floor (or roofline for a one-story building) to differentiate the storefront from upper levels of the building and to add visual interest; this also allows the storefront to function as the base for the rest of a multi-story building.
11. Awnings, signs, and related fixtures shall be located 8 feet min. above the adjacent sidewalk, and not within 2 feet of the r.o.w.
12. Awnings shall only cover Storefronts and openings, so as not to cover the entire Facade.
13. New or renovated storefronts within historic buildings should emulate or recreate a previous storefront (from historic photos or drawings) in order to harmonize with the overall building architecture. This can be flexibly interpreted, for example when the general form of a new storefront is like the original but uses contemporary materials.

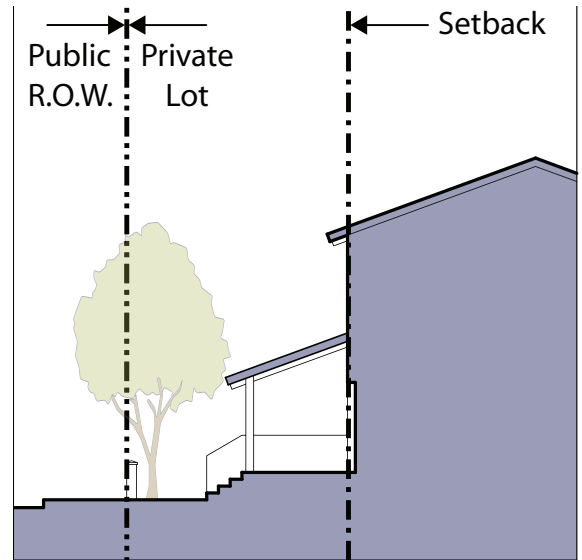
24SD:H1.204.040 Porch

A. DESCRIPTION.

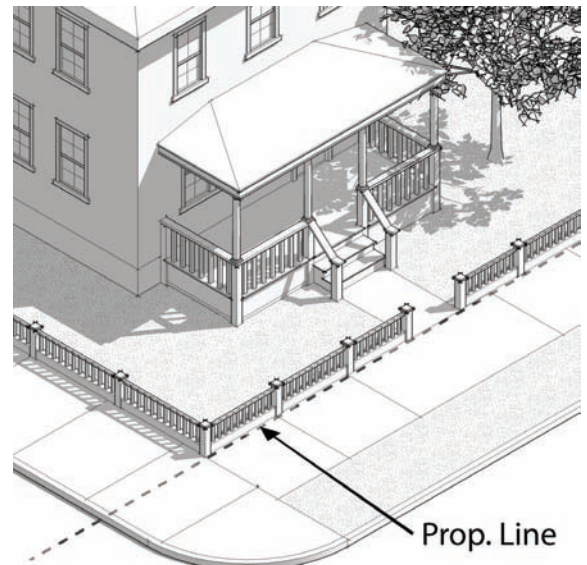
An encroaching porch may be appended to the facade. A great variety of porch designs are possible including a raised front yard with a retaining wall at the property line with entry steps to the yard.

B. DESIGN STANDARDS.

1. Porch encroachment into street build-to-line: 8' maximum.
2. Porches shall be 8' minimum deep (clear), 12' minimum wide (clear) and 9' minimum tall (clear).
3. Porches shall be raised 18" minimum and 3' maximum from the adjacent finished grade.



Section Diagram



Axonometric Diagram



Illustrative Photograph



Illustrative Photograph

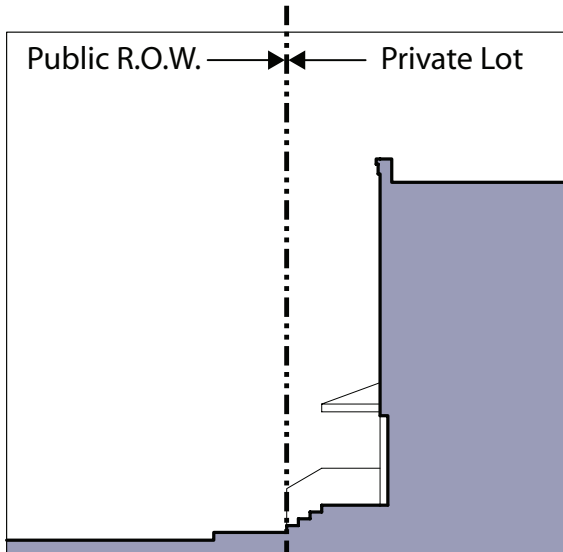
24SD:H1.204.050 Stoop

A. DESCRIPTION.

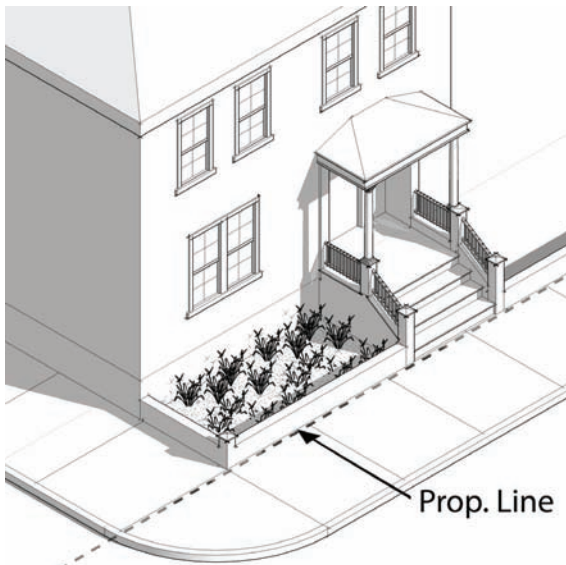
Stoops are elevated entry porches/stairs placed close to the frontage line with the ground story elevated from the sidewalk, securing privacy for the windows and front rooms. The stoop is suitable for ground-floor residential use at short setbacks. A shed roof may also cover the stoop. This type may be interspersed with the Shopfront & Awning frontage type.

B. DESIGN STANDARDS.

1. Street build-to-line encroachment: 8' maximum.
2. Stoops shall be raised 18" minimum and 36" maximum from the finished grade.
3. Stoops must correspond directly with the building entry(s) and be at least 3' wide (perpendicular to or parallel with the adjacent walk).
4. Stoops shall be 6' minimum and 10' maximum wide.
5. There may be a low (30" or less) decorative fence along the property lines.



Section Diagram



Axonometric Diagram



Illustrative Photograph



Illustrative Photograph

24SD:H1.204.060 Gallery

A. DESCRIPTION.

Galleries are a combination of an attached colonnade, with or without an exposed shed roof, that overlaps the sidewalk and storefront(s), providing a sheltered sidewalk environment for the adjoining shopfronts.

B. DESIGN STANDARDS

1. Galleries shall be no less than 10' wide clear in all directions, with 2' to 3' between curb face and gallery eave.
2. Along primary frontages, the gallery shall correspond to the adjoining storefront openings.
3. Primary frontage storefront openings shall be at least 65% of the first floor wall area and not have opaque or reflective glazing.
4. For Shopfront, refer to Section 24SD:H1.204.030, Design Standards 5-6.



Illustrative Photograph

24SD:H1.204.070 Arcade

C. DESCRIPTION.

Arcades are facades with an attached colonnade, covered by upper stories that provide a sheltered sidewalk environment for the adjoining shopfronts.

D. DESIGN STANDARDS.

1. Arcades shall be no less than 10' wide clear in all directions with 2' to 3' between curb face and the arcade.
2. Along primary frontages, the arcade shall correspond to the adjoining storefront openings.
3. Primary frontage storefront openings shall be at least 65% of the first floor wall area and not have opaque or reflective glazing.
4. For Shopfront, refer to Section 24SD:H1.204.030, Design Standards 5-6



Illustrative Photograph

24SD-H1.206

BUILDING TYPE STANDARDS

24HD.206.010 Purpose and Applicability

A. PURPOSE.

This Section identifies the building types allowed within the Hospital District, and provides design standards for each type, to ensure that proposed development is consistent with the City's goals for building form, character, and quality.

B. APPLICABILITY.

Each proposed building shall be designed in compliance with the standards of this Section for the applicable building type, except for public and institutional buildings, which because of their unique disposition and application are not required to comply with building type requirements.

C. ALLOWABLE BUILDING TYPES BY ZONE.

A lot may be developed only with a building type as allowed by Table 1 (Massing Standards).

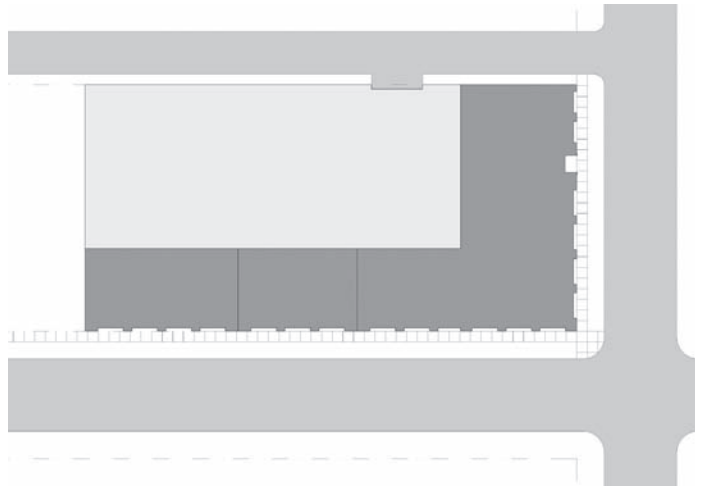
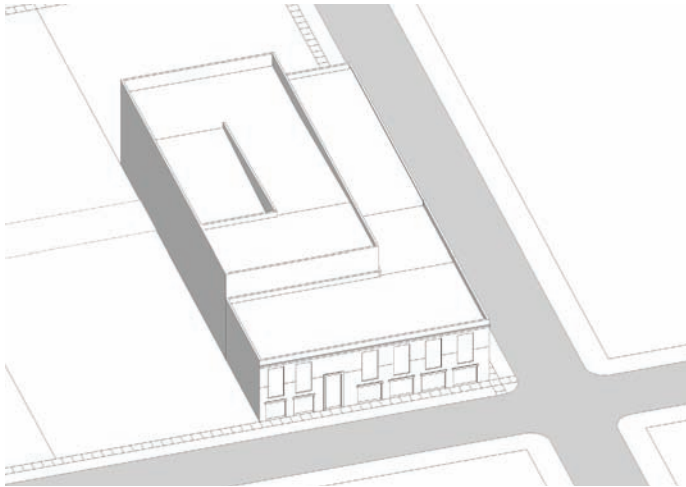
D. MIXED TYPE DEVELOPMENT.

The development regulations of this Code are structured by the definition of distinct building types that have been identified as specifically appropriate to Ventura, and to the CMH District, in scale, configuration and character. Particularly on deep lots, there is an opportunity to successfully mix these types within a single development project.

The guiding principles for such development are:

1. That the scale and character of the building(s) be calibrated to the existing urban context, often breaking down the scale of a large site into building masses and elements that are of a scale similar to the lotting and design of neighboring buildings.
2. That buildings without direct street frontage are provided with "addresses" and very direct and straightforward access for pedestrians unfamiliar with the development, by extending the public realm into the lot via new streets.

24HD.206.130 Lined Block



A. DESCRIPTION.

A building designed for occupancy by retail, service, and/or office uses on the ground floor street frontage, with upper floors configured for commercial use or for dwelling units which may be flats or townhouses. Ground floor residential uses are allowed on frontages where stoops or porches are permitted, and may be flats or townhouses. A Lined Block may be located upon a qualifying lot in the SD:H1 and Midtown Corridor Code zones. Such a building conceals an otherwise faceless or utilitarian building such as a laboratory or parking garage.

B. ACCESS.

1. The main entrance to each ground floor area shall be directly from and face the street. [E]
2. Entrance to the residential and/or non-residential portions of the building above the ground floor shall be through a street level lobby or through a podium lobby accessible from the street. [E]
3. Elevator access shall be provided to each level of the building where dwelling and/or commerce access occurs. [W]
4. Interior circulation to each dwelling shall be through a corridor which may be single or double-loaded. [E]
5. Where an alley is present, parking shall be accessed through the alley. [E]
6. Where an alley is not present, parking shall accessed from the street through the building. [E]
7. On a corner lot without access to an alley, parking shall be accessed from the side street through the building. [E]
8. Dwellings may be accessed via a single-loaded, exterior corridor, provided the corridor is designed per the following requirements:

- a. The open corridor length does not exceed 40'. [W]
- b. The open corridor is designed in the form of a balcony, a loggia, a terrace, or a wall with window openings. [DR]

C. PARKING AND SERVICES.

1. Required parking may be at-grade or as subterranean. If provided at-grade, parking spaces may be within a shared garage or an open parking area, but in no case within 30 feet of the street, except as otherwise provided in this code. [W]
2. Dwellings may have indirect access to their parking stalls. [DR]
3. Where an alley is present, services, above ground equipment and trash container areas shall be located on the alley. [W]
4. Where an alley is not present, above ground equipment and trash container areas shall be located at least 10' behind the façade of the building and be screened from view from the street with landscaping or a fence. [DR]
5. Parking entrances to garages and/or driveways shall be located as close as possible to the side or rear of each lot. [DR]

D. OPEN SPACE.

1. Front yards are defined by the street build-to line and frontage type requirements of the applicable zone. [DR]
2. Except when serving a liner, the primary shared open space is the rear yard, which may be designed as a courtyard. Courtyards may be located on the ground or on a podium. Side yards may also be provided for



outdoor patios connected to ground floor commercial uses. [E]

3. Private patios may be provided in side and rear yards. [DR]

E. LANDSCAPE.

1. No private landscaping is required in front of the building. [DR]
2. Trees may be placed in side yards to create a particular sense of place. [DR]
3. At least one large tree shall be provided in the rear yard, planted directly in the ground; except for podium courtyards. All parcels abutting residentially zoned parcels shall provide buffer landscaping to screen and minimize building mass as determined by the Decision-Making Authority. [DR]
4. Courtyards located over garages shall be designed to avoid the sensation of forced podium hardscape through the use of ample landscaping. [DR]

F. FRONTAGE.

1. Allowed frontage types include Forecourt, Shopfront, Porch, Stoop, Gallery, and Arcade.

G. BUILDING SIZE AND MASSING.

1. Buildings may contain any of three dwelling types: flats, townhouses, and lofts. [W]
2. Dwellings may be as repetitive or unique, as determined by individual designs. [DR]
3. Buildings may be composed of one dominant volume, and may be flanked by secondary ones. [DR]
4. The intent of these regulations is to produce buildings varying in height and mass, consistent with the design vision for the Plan Area.

5. Height and Massing of the new Hospital Tower and shall comply to the requirements provided in Table 1 (Elements A-G).
6. The visibility of elevators and of exterior corridors at the third, fourth and/or fifth stories shall be minimized by incorporation into the mass of the building. [DR]

[DR] Design Review

[W] Warrant

[E] Exception

24SD-H1.211

SIGN STANDARDS & DESIGN GUIDELINES

24SD:H1.211.010 Purpose

The purpose of the sign standards and design guidelines in this section is to provide a system of regulations for the Hospital District signs visible from the public right-of-way and to provide a set of standards that is designed to optimize communication and quality of signs while protecting the public and the aesthetic character of the Community Memorial Hospital District. It is further intended that these regulations:

- A. Promote the effectiveness of signs by preventing their over-concentration, improper placement, deterioration and excessive size and number.
- B. Promote the free flow of traffic and protect pedestrians and motorists from injury and property damage caused by, or which may be fully or partially attributable to, cluttered, distracting, or illegal signage.
- C. Assure that public benefits derived from expenditures of public funds for the improvement and beautification of streets and other public Structures and spaces shall be protected by exercising reasonable control over the character and design of sign structures.
- D. Address the hospital and business community's need for adequate business identification and advertising communication by improving the readability, and therefore, the effectiveness of Signs by preventing their improper placement, over-concentration, excessive Height, area and bulk.
- E. Are specifically intended to be severable, such that if any section, subsection, sentence, clause or phrase of these regulations is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, the decision shall not affect the validity of the remaining provisions of these regulations.

24SD:H1.211.020 Applicability

- A. The sign standards in this Article determine the allowed type and size, material, and design requirements for signage on commercial and residential development. In the event of a conflict between this Section and any other City code, the provisions of this Section shall apply. All issues not specifically addressed herein shall be addressed pursuant to the City's Municipal Code.

- B. The replacement of nonresidential signs due to tenant changes is exempt from this section if:
1. No other exterior alterations are proposed; and
 2. The proposed sign is in compliance with the existing approved sign program.

24SD:H1.211.030 Permit Requirements

A. INDIVIDUAL SIGNS

1. The Director shall have the authority to review and approve all signs complying with the standards of this Article except as otherwise noted.
2. The Director may also forward any sign requests to the Design Review Committee for decision. Signs forwarded to the Design Review Committee shall be reviewed pursuant to Sec. 24.545.030 of the Municipal Code. Any sign requests not complying with these standards shall require Design Review approval.

B. SIGN PROGRAM REQUIREMENTS

1. A master sign program shall be required for:
 - a. A new nonresidential project with four or more tenants;
 - b. A site where the total area of signs for any use exceeds 100 square feet; or
 - c. Major rehabilitation work on an existing nonresidential project with four or more tenants that involves exterior remodeling. For the purposes of this Article, major rehabilitation means adding more than 50 percent to the gross floor area of the structure(s), or exterior redesign of more than 50 percent of the length of any facade within the project.
2. Each sign installed or replaced within the qualifying nonresidential project shall comply with the approved master sign program.
3. A master sign program shall require Design Review Committee approval. Any sign requests not complying with the master sign program shall require Design Review approval.

24SD:H1.211.040 General Design Standards and Guidelines

The following design standards and guidelines shall apply to all signs:

A. DESIGN STANDARDS

1. Signs shall not be animated.
2. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
3. With the exception of temporary window signs, content including contact information such as telephone numbers, e-mail addresses, and websites are prohibited.
4. “Canned” signs are internally illuminated plastic panels within a sheet metal box enclosure and shall not be used because these signs use a limited range of colors and lettering types and tend to have no relationship to the architecture of the building.

B. DESIGN GUIDELINES

1. In general, only natural construction materials such as wood, metals, ceramic, and stone should be used for signs. Synthetic materials should only be used if they are designed to resemble the recommended natural materials. Plastic or acrylic panels are strongly discouraged.
2. Illumination should consist of incandescent, halogen, neon, LED, and metal halide light sources only. High pressure sodium, low pressure sodium, and fluorescent lighting are strongly discouraged.
3. Contrasting colors should be used between the color of the background and the letters of symbols used. Light letters on a dark background or dark letters on a light background are most legible.
4. Colors or color combinations that interfere with the legibility of the sign copy should be avoided. Too many colors can confuse the message of a sign.
5. Sign design, including color, should be appropriate to the establishment, conveying a sense of what type of business is being advertised.
6. The location of all permanent signs should be incorporated into the architectural design of the building. Placement of signs should be considered part of the overall facade design. Sign locations should be carefully considered, and align with major architectural features.
7. Storefront signage should help create architectural variety from establishment to establishment. In multi-tenant buildings, signage should be used to create interest and variety.
8. All signs should present a neat and aligned appearance.
9. All signs should be constructed and installed utilizing the services of a professional sign fabricator.

24SD:H1.211.050 Sign Standards for Commercial Uses

The subsequent sign types and standards shall apply in Hospital District Zone (SD:H1):

A. DIRECTIONAL SIGNS

Directional signs are intended to guide traffic at entrances, exits, or parking areas.

Standards:

1. Directional signs may be combined with address.
2. Signs may include the name of the facility which occupies the site but shall not serve as a form of advertising or act as business identification.
3. No more than one (1) such sign may be erected per entrance, exit, or parking area.
4. The sign area shall not exceed five (5) square feet and (4) feet in height.

B. MONUMENT SIGNS

A monument sign is a permanent sign supported by one or more braces in or upon the ground. Monument signs are subject to Design Review pursuant to Chapter 24.420.070 of the Municipal Code.

Standards:

1. A monument sign may have a maximum sign area of 40 square feet and a maximum height of six (6) feet as measured from the highest point of the sign structure.
2. The monument sign shall be located three (3) feet from all property lines and a minimum ten (10) feet from the face of any curb line.
3. Monument sign may be located in a landscape area only to the extent approved by the decision-making authority through the design review process pursuant to Chapter 24.545.

C. POLE SIGNS

Pole signs are not permitted in the Hospital District Zone (SD:HD1). Exceptions are directory and directional signs for the hospital that may be considered as part of a Master Sign Program. The design, location, and number of pole signs shall be subject to Design Review Committee approval of the Master Sign Program.

D. PORTABLE SIGNS

A portable sign is a self-supporting sign designed to be movable and not structurally attached to the ground, a building, a structure, or another sign. Portable signs include, but not limited to, sandwich boards, A-frame signs, and other similar signs.

Standards:

1. One portable sign is allowed per building.
2. Portable signs shall be placed on private property immediately in front of the business, within the width of store frontage and not, for example, at the street corner in front of other businesses.
3. For businesses located in an arcade or plaza, a portable sign may be placed at the street entrance to the arcade or plaza.
4. Portable signs shall be stored indoors after hours of operation.
5. The sign shall be made of substantial materials such as wood or metal (cardboard or paper signs are not permitted).
6. The sign is limited to no more than ten (10) square feet in area per sign face.
7. Signs in the public right of way shall be placed against the building to maintain a minimum of four (4) feet of clearance to any curblin, street furniture or above ground utilities.

E. WALL SIGNS

Wall signs are signs that are located on, and parallel to a building wall.

Standards:

1. For a single establishment within a building:
 - a. When a single establishment takes up an entire building, wall signs shall be limited to one and one half (1 1/2) square feet of sign area for each lineal foot of wall fronting on a street.
 - b. There shall be no more than one wall sign for each one hundred and fifty (150) linear feet along a street frontage, with no more than three (3) total on any wall.
 - c. Walls that do not have street frontage may contain no more than one wall sign each, not to exceed fifty (50) square feet in area for each sign, but aggregate area shall be included as part of aggregate wall sign area as limited herein.
2. For a single building with more than one establishment opening up to the outdoors:
 - a. Each individual establishment on the ground floor, with ground floor street frontage and separate entrances on the ground floor that open towards such street frontages, shall be allowed the following signs:
 - i. A wall sign not to exceed one (1) square foot in area for each lineal foot of frontage of the establishment;
 - ii. Window signs not to exceed twenty percent (20%) of the glass area of the window or glass door in which placed. Such window signs may be painted or attached. The number of such signs is not limited by these regulations, but aggregate area shall be included as part of aggregate wall sign area, as limited above;

- iii. An awning sign, limited to the skirt or bottom edge of the awning. Letters, emblems, logos, or symbols not to exceed six (6) inches in height; and
 - iv. A hanging sign, as in under the awning or similar structure. The size of the hanging sign not to exceed three (3) square feet in area.
 - 3. Limitation on Wall Signs Above a Height of Thirty-five (35) feet Above Grade
 - a. The following regulations shall apply to all signs above a height of thirty-five (35) above grade:
 - i. Signs shall be limited to the identification of the building or the name of one (1) major tenant of the building occupying more than ten percent (10%) of the gross leasable building floor area. Not more than two (2) signs per building on two (2) separate building facades shall be permitted.
 - ii. Signs shall consist only of individual letters or a graphic logo type. No graphic embellishments such as borders or backgrounds shall be permitted.
 - iii. The maximum height of a letter shall be four (4) feet. The maximum length of the sign shall not exceed eighty percent (80%) of the width of the building wall upon which it is placed.
 - iv. Signs should respect the architectural features of the facade and be sized and placed subordinate to those features. Overlapping of functional windows, extensions beyond parapet edges obscuring architectural orientation or disruption of dominant facade lines are examples of sign design problems considered unacceptable.
 - v. Featured lighting of the building, including exposed light elements that enhance building lines shall not be construed as signs subject to these regulations.

F. PROJECTING SIGNS

Projecting signs are cantilevered signs that are structurally affixed to the building and oriented perpendicular to the building facade.

Standards:

- 1. Shall be limited to one (1) sign structure with no more than two (2) sign surfaces, neither of which shall exceed sixteen (16) square feet in sign area.
- 2. Projecting signs shall project no more than four (4) feet from the facade of the building.
- 3. No portion of the projecting sign shall be lower than eight (8) feet above the level of the sidewalk or other public right-of-way over which it projects.

4. The aggregate of such projecting signs shall be included as part of aggregate wall sign area, as limited above.

G. MURALS

A mural is an image on a wall for non-commercial uses. For example: public art murals depicting Ventura images may be considered as a screen for parking garage wall.

Standards

1. All murals are exempted from size restrictions.
2. Murals shall only be located on non-fenestrated wall areas.
3. Murals shall project no more than one (1) foot from the facade of the building.
4. All murals are subject to Design Review.

24SD:H1.211.060 Sign Standards for Residential Uses

The subsequent sign types and standards shall apply in Hospital District Zone (SD:H1). Signs may be provided for residential components of mixed-use projects in addition to commercial signs.

A. WALL SIGNS

Standards

1. Individual letters on the building facade are permitted for residential development
2. Maximum area shall be one (1) square foot per one (1) linear foot of tenant street frontage, up to a total of 100 square feet.
3. Signs for Live/Work Dwellings: Live/work dwellings may have sign subject to the following standards:
 - a. Maximum two (2) square foot sign area.
 - b. Signs are non-illuminated.
 - c. Signs can be placed upon windows, doors, or a building wall, below the second floor.

B. MONUMENT SIGN

Standard

1. Monument signs shall have a maximum sign area of twenty (20) square feet and a maximum height of six (6) feet.

24SD-H1.300

DEFINITIONS

24SD:H1.300.010 Purpose

This Section provides definitions of terms and phrases used in this Hospital District Code that are technical or specialized, or that may not reflect common usage. If a definition in this Section conflicts with a definition in another provision of the Zoning Ordinance or any other provision in the Municipal Code, these definitions shall control for the purposes of this Hospital District Code. If a word or phrase is not defined in this Section, the definition of such word or phrase as defined in the General Plan or the zoning ordinance shall apply, in that order. If a word or phrase is not defined in this Section or the General Plan or the Zoning Ordinance, and a question arises as to how it is to be applied to a development proposal subject to this Hospital District Code, the Director shall determine the applicable definition in accordance with the provisions of Chapter 24.505, giving deference to common usage and the purpose and intent of the General Plan, the zoning ordinance, and this Hospital District Code.

24SD:H1.300.020 Definitions Of Specialized Terms And Phrases

As used in this Hospital District Code, the following terms and phrases shall have the meaning given them in this Section, unless the context in which they are used clearly requires otherwise.

A. DEFINITIONS "A".

Adult Business See Zoning Ordinance Chapter 24.492.

Affordable Housing means a residential unit that is restricted to occupancy by an income eligible household as defined by a local, State, or Federal Program, as may be amended from time to time.

Allee means a regularly spaced and aligned row of trees usually planted along a thoroughfare or pedestrian path.

B. DEFINITIONS "B".

Bar, Tavern, Night Club means an establishment providing entertainment such as live music and dancing, on-site alcohol consumption, but not adult entertainment. The sale of alcoholic beverages is separately regulated by Chapter 24.460 (Alcoholic Beverage Establishments - Use Permit). Entertainment is also separately regulated by Chapter 10.450 (Dance Halls).

Bicycle Lane (BL) means a dedicated bicycle lane running within a moderate-speed vehicular thoroughfare, demarcated by striping.

Bicycle Route (BR) means a thoroughfare suitable for the shared use of bicycles and automobiles moving at low speeds.

Bicycle Trail (BT) means a bicycle way running independently of a high-speed vehicular thoroughfare.

Block means the aggregate of private lots, passages, rear lanes and alleys, circumscribed by thoroughfares.

Block Face means the aggregate of all the building facades on one side of a block. The Block Face provides the context for establishing architectural harmony.

Building Configuration means the form of a building, based on its massing, private frontage, and height.

Building Disposition means the placement of a building on its lot.

Building Function means the uses accommodated by a building and its lot. Functions (i.e.: use) are categorized in (Land Use Tables) Section 24HD.203 and are either permitted by right or via use permit.

Building Height means the vertical extent of a building measured in stories, not including a raised basement or a habitable attic. Exceptions to height limits specified in this Hospital District Code are the exceptions listed in Section 24.405.030 of the zoning ordinance as it may be amended, revised or replaced from time to time. Building heights are specified in the Zones and Development Standards and illustrated in Table 1.

Building Type means a structure category determined by function, disposition on the lot, and configuration, including frontage and height.

Business Support Service means a business that provides services to other businesses. Examples include:

- blueprinting;
- computer-related services (rental, repair);
- copying and quick printing services;
- film processing and photofinishing (retail); and
- mailing and mail box services.

C. DEFINITIONS “C”.

CEQA refers to the California Environmental Quality Act. Its basic purposes are to: inform governmental decision makers and the public about the potential significant environmental effects of proposed activities; identify ways that environmental damage can be avoided or significantly reduced; require changes in projects through the use of alternatives or mitigation measures when feasible; and disclose to the public the reasons why a project was approved if significant environmental effects are involved. CEQA applies to projects undertaken, funded or requiring an issuance of a permit by a public agency. (Definition from: South Coast Air Quality Management District website - <http://www.aqmd.gov/>)

Civic means, a use operated by a public agency or non-profit organization for the primary purpose of providing a service to the general public. Such uses are dedicated to, by way of example but without limitation, arts, culture, education, recreation, government, transit, and municipal/public parking.

Civic Building means a building owned or leased by a public agency or non-profit organization for the primary purpose of providing a service to the general public dedicated to arts, culture, education, recreation, government, transit, and municipal/public parking.

Civic Space means an outdoor area dedicated for public use. Civic Space types are defined by the combination of certain physical constants including the relationship between their intended use, their size, their landscaping and their enfronting buildings.

Commercial means the term collectively defining workplace, office and retail functions.

Community Meeting means uses consisting of group gatherings conducted indoors. Typical uses include synagogues, mosques, temples, churches, community centers, bingo halls, private clubs, fraternal, philanthropic and charitable organizations, and lodges. Additional typical uses include those providing live or recorded events or performances, or other activities intended for spectators that are conducted within an enclosed building such as motion picture theaters, music performance halls, and sports arenas.

Context means surroundings, including a combination of architectural, natural and civic elements that define specific neighborhood or block character.

Corridor means a lineal geographic area of built intensity, usually occurring along a major thoroughfare at the edges of neighborhoods, where either a relatively dense collection of similar uses exists, or where there is strong opportunity for growth and intensity, based on location.

D. DEFINITIONS “D”.

Day Care means day care centers as defined by the Health and Safety Code, and the day care and supervision of more than 12 children under 18 years of age for period less than 24 hours per day.

Density means the number of dwelling units within a standard measure of land area, usually given as units per acre.

Design Speed means is the velocity at which a thoroughfare tends to be driven without the constraints of signage or enforcement. There are three ranges of speed: Very Low: (below 20 mph); Low: (20-25 mph); Moderate: (25-35 mph); High: (above 35 mph). Lane width is determined by desired design speed.

Drive -Through Retail or Service means a retail or service business where services may be obtained by motorists without leaving their vehicles. Examples include automated teller machines (ATMs), banks, pharmacy dispensaries, and restaurants.

Driveway means a vehicular lane within a lot, usually leading to a garage.

Dwelling - Multi-Unit means a single structure containing two or more dwelling units, or multiple units arranged with zero lot lines. These include: duplexes, triplexes, quadplexes, rowhouses, courtyard housing, and stacked dwellings.

Dwelling - Single Dwelling means a building designed for and/or occupied exclusively by one housekeeping unit. Also includes factory built, modular housing units, constructed in compliance with the Uniform Building Code (UBC), and mobile homes/manufactured housing units that comply with the National Manufactured Housing Construction and Safety Standards Act of 1974, placed on permanent foundation systems.

E. DEFINITIONS “E”

Elevation means an exterior wall of a building not along a Frontage Line. See: Facade.

Enfront means to place an element along a frontage line, as in “porches enfront the street.”

Entrance, Principal means the main point of access of pedestrians into a building.

F. DEFINITIONS “F”

Facade means the exterior wall of a building that is set along a Frontage Line (see Elevation; Frontage Line).

Forced Podium Hardscape means a built condition which can occur when the “podium” created by the protruding roof of a sub-grade garage is minimally landscaped and not provided other design elements such as seating areas, fountains and gardens, to soften an otherwise featureless concrete appearance and provide areas within the courtyard that are attractive to, and usable by residents and their visitors for active and passive pursuits.

Frontage Line means those lot lines that coincide with a public frontage. Facades along Frontage Lines define the public realm and are therefore more regulated than the elevations that coincide with other Lot Lines.

Frontage Type means the architectural element of a building between the public right-of-way and the private property associated with the building. Frontage Types combined with the public realm create the perceptible streetscape. The following types are listed as they appear in this code (Section 24SD:H1.204.012):

- a. Arcade: a facade with an attached colonnade, that is covered by upper stories. This type is ideal for retail use, but only when the sidewalk is fully absorbed within the arcade so that a pedestrian cannot bypass it.
- b. Gallery: a storefront with an attached colonnade, that projects over the sidewalk and encroaches into the public right of way. This frontage type is ideal for retail use but only when the sidewalk is fully absorbed within the colonnade so that a pedestrian cannot bypass it.
- c. Forecourt: a semi-public exterior space partially surrounded by a building and also opening to a thoroughfare. These spaces usually lead to a Court, which is a private exterior space. It is often used as a vehicular entrance or drop-off, and its landscape may be improved with paving.

- d. Shopfront: a facade placed at or close to the right-of-way line, with the entrance at sidewalk grade. This type is conventional for retail frontage and is commonly equipped with cantilevered shed roof(s) or awning(s). Recessed storefronts are also acceptable. The absence of a raised ground floor precludes residential use on the ground floor facing the street, although such use is appropriate above.
- e. Stoop: an elevated entry porch/stairs placed close to the frontage line with the ground story elevated from the sidewalk, securing privacy for the windows and front rooms.
- f. Porch: an encroaching porch may be appended to the facade. A great variety of porch designs are possible including a raised front yard with a retaining wall at the property line with entry steps to the yard.

G. DEFINITIONS “G”.

Gas Stations means retail sale, from the premises, of vehicle fuel which may include the incidental sale of other petroleum products, tires, batteries, and replacement items, and the incidental provision of minor repairs and lubricating services. Typical uses include automobile service and filling stations, and special oil change and lube shops.

H. DEFINITIONS “H”.

Health/Fitness Facility means establishments offering predominantly participant sports within an enclosed building. Typical uses include bowling, alleys, billiard parlors, pool halls, indoor ice or roller skating rinks, indoor racquetball courts, indoor batting cages and health or fitness club.

Home Occupation means an occupation conducted at a premise containing a dwelling unit, as an incidental use by the occupant of that dwelling.

Hospital District Zone means the Zone, as described in Section 24.200 of this Code, and delineated in the Regulating Plan (Section 24.102.040) where future development of the properties described in this code will occur.

I. DEFINITIONS “I”.

Infill means a project within existing urban fabric.

Inside Turning Radius means the curved edge of a thoroughfare at an intersection, measured at the inside edge of the vehicular tracking. The smaller the Turning Radius, the smaller the pedestrian crossing distance and the more slowly the vehicle is forced to make the turn.

J. DEFINITIONS “J”.

K. DEFINITIONS “K”.

L. DEFINITIONS “L”.

Liner Building means a building specifically designed to mask a parking lot or a parking garage from a frontage. The Commercial Block Building

is allowed to be modified to serve as a Liner, as specified in section 24HD:S1.206.130

Lodging means establishments providing two (2) or more housekeeping units or six (6) or more rooms or suites for temporary rental to members of the public and which may include incidental food, drink, and other sales and services intended for the convenience of guests. Typical uses include hotels, motels, and timeshare facilities.

Lot Line means the boundary that legally and geometrically demarcates a lot (see Frontage Line).

Lot Width means the length of the principal Frontage Line of a lot.

M. DEFINITIONS “M”.

Medical/Dental means establishments providing medical, psychiatric, surgical, dental or other health-related services. This includes medical, dental, psychiatric or other therapeutic services offered in individual offices or suites, which may include laboratories incidental to the practitioner’s consulting or therapeutic work but excluding licensed health facilities, as defined in Health and Safety Code Section 1250, except as provided in Health and Safety Code Section 1267.8.

Mortuary, Funeral Home means a funeral homes and/or parlor where deceased are prepared for burial or cremation, and funeral services may be conducted.

N. DEFINITIONS “N”.

Neighborhood means an urbanized area at least 40 acres that is primarily residential. A neighborhood shall be based upon a partial or entire Standard Pedestrian Shed. The physical center of the Neighborhood should be located at an important traffic intersection associated with a Civic or Commercial institution.

O. DEFINITIONS “O”.

Office means offices of firms or organizations that primarily provide executive, management, administrative or financial services. It also refers to establishments primarily engaged in providing professional services to individuals or businesses, but excludes uses classified under the Medical/Dental. Typical uses include corporation headquarters and administrative offices, banks, savings and loans, law offices, real estate offices, public relations firms, advertising firms, insurance offices, travel agencies, and photography studios.

P. DEFINITIONS “P”.

Parking Facility - Public or Commercial means a parking lot or structure operated by the City, or a private entity providing parking for a fee. Does not include towing impound and storage facilities.

Parking Structure means a building containing two or more stories of parking. Parking Structures shall have Liner Buildings at the first story or higher.

Passage (PS) means a pedestrian connector passing between buildings, providing shortcuts through long blocks and connecting rear parking areas to frontages. Passages may be roofed over.

Path (PT) means a pedestrian way traversing a park or rural area, with landscape matching the contiguous open space. Paths should connect directly with the urban sidewalk network.

Pedestrian Shed means an area, approximately circular, that is centered on a common destination. A Pedestrian Shed is applied to determine the approximate size of a neighborhood. A Standard Pedestrian Shed is 1/4 mile radius or 1320 feet, about the distance of a five-minute walk at a leisurely pace. It has been shown that provided with a pedestrian environment, most people will walk this distance rather than drive. The outline of the shed must be refined according to actual site conditions, particularly along Thoroughfares. A Long Pedestrian Shed is 1/2 mile radius or 2640 feet, and may be used for mapping when transit is present or proposed. Sometimes called a “walkshed” or “walkable catchment.” A Linear Pedestrian Shed is elongated to follow a commercial corridor.

Personal Services means establishments primarily engaged in the provision of services for the enhancement of personal appearance, cleaning, alteration or reconditioning of garments and accessories, and similar non-business related or non-professional services. Typical uses include reducing salons, tanning salons, barber shops, tailors, shoe repair shops, self-service laundries, and dry cleaning shops, but exclude uses classified under the Office and Trade School.

Planter means the element of the public streetscape which accommodates street trees. Planters may be continuous or individual.

Principal Building means the main building on a lot, usually located toward the frontage.

Printing and Publishing means a business that provides printing services using letterpress, lithography, gravure, screen, offset, or electrostatic (xerographic) copying; and other establishments serving the printing trade including bookbinding, typesetting, engraving, photoengraving and electrotyping. This use also includes: businesses that publish newspapers, books and periodicals; establishments manufacturing business forms and binding devices. “Quick printing” services are included in the definition of “Business Support Services.”

Private Frontage means the privately held layer between the frontage line and the principal building facade. The structures and landscaping within the Private Frontage may be held to specific standards. The variables of Private Frontage are the depth of the setback and the combination of architectural elements such as fences, stoops, porches and galleries.

Public Frontage means the area between the curb of the vehicular lanes and the Frontage Line. Elements of the Public Frontage include the type of curb, walk, planter, street tree and streetlight.

Q. DEFINITIONS “Q”.

R. DEFINITIONS “R”.

Rear Alley (AL) means a vehicular driveway located to the rear of lots providing access to service areas and parking, and containing utility easements. Alleys should be paved from building face to building face, with drainage by inverted crown at the center or with roll curbs at the edges.

Rear Lane (LA) means a vehicular driveway located to the rear of lots providing access to parking and outbuildings and containing utility easements. Rear lanes may be paved lightly to driveway standards. Its streetscape consists of gravel or landscaped edges, no raised curb and is drained by percolation.

Research and Development (R&D) means a facility for scientific research, and the design, development and testing of electrical, electronic, magnetic, optical and computer and telecommunications components in advance of product manufacturing; and the assembly of related products from parts produced off-site, where the manufacturing activity is secondary to the research and development activities. Includes pharmaceutical, chemical and biotechnology research and development. Does not include soils and other materials testing laboratories (see “Laboratory”).

Residential means premises available for long-term human dwelling.

Residential Accessory Use or Structure means a use and/or structure that is customarily a part of, and clearly incidental and secondary to a residence, and does not change the character of the residential use. This definition includes, by way of example, the following types of uses or detached accessory structures, and other similar structures normally associated with a residential use of property:

- garage;
- gazebo;
- greenhouse (non-commercial);
- spa, hot tub;
- storage shed;
- studio;
- swimming pool;
- tennis or other on-site sport court; and
- workshop.

Also includes the indoor storage of automobiles, personal recreational vehicles and other personal property, accessory to a residential use. Does not include second units and carriage houses, which are separately defined.

Restaurant means sale of prepared food and beverages in a ready-to-eat state for on-site or off-site consumption. A dining area may or may not be provided. Vehicle drive-up service is prohibited. The restaurant use may be ancillary to another use.

Retail means establishments engaged in the sale of goods and merchandise.

Retail Frontage Line means Frontage Lines that require the provision of a Shopfront, causing the ground level to be available for retail use.

Rowhouse means a single-family dwelling that shares a party wall with another of the same type and occupies the full frontage line (synonymous: Townhouse).

S. DEFINITIONS “S”.

School includes the following facilities:

Elementary, Middle, Secondary means a public or private academic educational institution, including elementary (kindergarten through 6th grade), middle and junior high schools (7th and 8th grades), secondary and high schools (9th through 12th grades). May also include any of these schools that also provide room and board.

Specialized Education/Training means a public or private institution that provides education and/or training, including vocational training, in limited subjects. Examples of these schools include:

- art school;
- ballet and other dance school;
- business, secretarial, and vocational school;
- computers and electronics school;
- drama school;
- driver education school;
- establishments providing courses by mail;
- language school;
- martial arts;
- music school;
- professional school (law, medicine, etc.); and
- seminaries/religious ministry training facility.

Does not include pre-schools and child day care facilities (see “Day Care”). See also the definition of “Studio - Art, Dance, Martial Arts, Music, etc.” for smaller-scale facilities offering specialized instruction.

Setback means the area of a lot measured from the lot line to a building facade or elevation. This area must be maintained clear of permanent structures with the exception of: galleries, fences, garden walls, arcades, porches, stoops, balconies, bay windows, terraces and decks (that align with the first story level) which are permitted to encroach into the Setback.

Sidewalk means the paved layer of the public frontage dedicated exclusively to pedestrian activity.

Single Room Occupancy (SRO) means a building with single rooms that are made available for rental and that provide sleeping areas with shared bathrooms and kitchens.

Special Residential means a use within or comprising any of the following use types as the definitions of same may be amended from time to time: Group Care Residential (defined in the Zoning Ordinance), Group Care (defined in the Zoning Ordinance), Boarding Houses (defined in the Zoning Ordinance), and Single Room Occupancy (defined in this Glossary).

Standard Pedestrian Shed means an area, approximately circular, that is centered on a common destination. A Pedestrian Shed is applied to determine the approximate size of a neighborhood. A Standard Pedestrian Shed is 1/4 mile radius or 1320 feet, about the distance of a five-minute walk at a leisurely pace. It has been shown that provided with a pedestrian environment, most people will walk this distance rather than drive. The outline of the shed must be refined according to actual site conditions, particularly along thoroughfares. Sometimes called a “walkshed” or “walkable catchment.” See Pedestrian Shed.

Story means a habitable level within a building where ground floor is a minimum of 10 feet in height and upper stories are no more than 14 feet in height from finished floor to floor. Attics and raised basements are not considered stories for the purposes of determining building height.

Street (ST) means a local urban thoroughfare of low speed and capacity. Its public frontage consists of raised curbs drained by inlets and sidewalks separated from the vehicular lanes by a planter and parking on both sides. The landscaping consists of regularly placed street trees.

Streetscape means the urban element that establishes the major part of the public realm. The streetscape is composed of thoroughfares (travel lanes for vehicles and bicycles, parking lanes for cars, and sidewalks or paths for pedestrians) as well as the visible private frontages (building facades and elevations, porches, yards, fences, awnings, etc.), and the amenities of the public frontages (street trees and plantings, benches, streetlights, etc.).

Studio - Art, Dance Martial Arts, Music, etc. means small scale facilities, typically accommodating one group of students at a time, in no more than one instructional space. Larger facilities are included under the definition of “Schools - Specialized education and training.” Examples of these facilities include: individual and group instruction and training in the arts; production rehearsal; photography, and the processing of photographs produced only by users of the studio facilities; martial arts training studios; gymnastics instruction, and aerobics and gymnastics studios with no other fitness facilities or equipment. Also includes production studios for individual musicians, painters, sculptors, photographers, and other artists.

T. DEFINITIONS “T”.

Thoroughfare means a vehicular way incorporating moving lanes and parking lanes within a right-of-way.

Townhouse is synonymous with “Rowhouse”.

Transect means a system of ordering human habitats in a range from the most natural to the most urban as summarized in Chapter 3 of the General Plan. Among other applications of the transect, the SmartCode is based upon six Transect Zones which describe the physical character of place at any scale, according to the density and intensity of land use and urbanism.

Transect Zone (T-Zone) means a geographically specific zoning classification established to regulate development patterns in accordance with the transect system. Transect Zones are administratively similar to the land-use zones in conventional zoning ordinances, except that in addition to the usual building use, density, height, and setback requirements, other elements of the intended habitat are integrated, including those of the private lot and building and the enfronting public streetscape. The elements are determined by their location on the Transect scale. The basic T-Zones are: T1 Natural, T2 Rural, T3 Sub-Urban, T4 General Urban, T5 Urban Center, and T6 Urban Core.

Transit Station or Terminal means a passenger station for vehicular, and rail mass transit systems; and terminal facilities providing maintenance and service for the vehicles operated in the transit system. Includes bus terminals, taxi stands, railway stations, etc.

Transition Line means a horizontal line spanning the full width of a facade, expressed by a material change or by a continuous horizontal articulation such as a cornice or a balcony.

Type means a category determined by function, disposition, and configuration, including size or extent. There are community types, street types, open space types, building types, frontage types, etc.

U. DEFINITIONS “U”.

V. DEFINITIONS “V”.

W. DEFINITIONS “W”.

Wireless Telecommunications Facility as defined in Zoning Ordinance Chapter 24.497.

X. DEFINITIONS “X”.

Y. DEFINITIONS “Y”.

Z. DEFINITIONS “Z”.



Appendix H

Preliminary Hydrology and Hydraulic Report

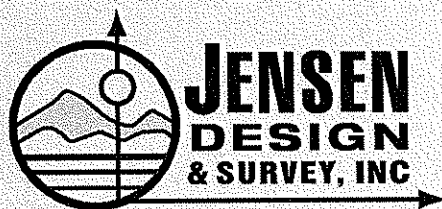


Preliminary Hydrology & Hydraulic Report

Community Memorial Hospital **147 North Brent Street** **Ventura, CA**

November 9, 2009

Prepared by:



Engineers

Planners

Surveyors

PRELIMINARY HYDROLOGY AND HYDRAULIC REPORT

Community Memorial Hospital
147 North Brent Street
Ventura, CA

PREPARED BY:

JENSEN DESIGN & SURVEY, INC
1672 Donlon Street
VENTURA, CA 93003
(805) 654-6977

Frederick T. Giroux, P.E.
License No. C057289 Exp. 12/31/2009

November 9, 2009

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Procedure	1
Hydrology.....	1-3
Existing Conditions	1-2
Developed Conditions.....	2-3
Stormwater Treatment	3
100 Year Flood Analysis	4
Conclusion	4

APPENDICES

Appendix A – Location Map	5-6
Appendix B - Existing Runoff Calculations & Exhibit.....	7-45
Appendix C – Developed Runoff Calculations & Exhibit.....	46-73
Appendix D – Infiltration Trenches Size and Calculations.....	74-83
Appendix E – Flood Insurance Rate Map.....	84-86
Appendix F – Kristar Flogard Plus Inserts.....	87-96
Appendix G – Pipe Capacity Calculations.....	97-101

INTRODUCTION

The proposed development is located north of Main Street, south of Loma Vista Road and west of Brent Street. The Site includes the Community Memorial Hospital (CMH) Campus, a City of Ventura parking structure, adjacent buildings and existing city parking lots. Proposed improvements will consist of demolition of existing buildings and parking lot areas to accommodate construction of a new hospital structure, a new park area and new parking improvements. The proposed development also includes reconfiguration of Cabrillo Drive and the construction of a new street to the south.

This preliminary drainage report provides an evaluation of the existing drainage conditions and storm drain system and the developed drainage conditions and proposed storm drain improvements within the CMH Site. This report will also identify the pre-developed and post-developed stormwater peak runoff quantities as well as the treatment measures required for the re-development of this site.

PROCEDURE

The Rational Method as described in the Ventura County Hydrology Manual was used to calculate existing and developed peak runoff amounts. Times of concentration for the drainage areas were calculated for both scenarios using the Ventura County Watershed Protection District's Time of Concentration Calculator. The calculated time of concentration was then used to find the intensity for the 10, 50 and 100 year storm events. Runoff hydrographs for each storm event for each drainage area were calculated using the rainfall intensities and soil characteristics for those areas.

HYDROLOGY

Existing Conditions

In its existing condition the site is occupied by existing buildings and paved parking lot areas (Appendix B - Figure 1). The site is approximately 85% impervious and directs its runoff towards an existing 24" Storm drain line located along the Alley, and a system of catch basins located along Brent Street, near Telegraph Road. The site has been divided into four drainage areas (Appendix B – Figure 1).

Runoff from the northerly part of drainage Area A sheet flows towards a series of catch basins located along Loma Vista Road. Runoff collected by these catch basins is released into Brent Street and is allowed to sheet flow southerly towards two catch basins located at the southerly end of Brent Street. The remaining runoff from drainage Area A sheet flows directly into Brent Street and eventually enters the same two catch basins described above. This runoff is then directed to a 36" Storm Drain Line located in Brent Street, ultimately connecting to a 48" Storm Drain Line located in Main Street.

Runoff from drainage Area A1 is primarily sheet flow and is directed towards Brent Street, where it mixes with runoff collected from drainage Area A. This runoff eventually enters the catch basins along Brent Road.

Runoff from drainage Area B is primarily sheet flow towards a series of storm drain inlets. The most northerly part of this watershed sheet flows to catch basins located in Loma Vista Road. These catch basins connect directly to a 24" SD line located in the

existing alley. The remaining runoff from drainage Area B is directed to on-site drain inlets which connect directly to the same 24" storm drain Line. This line ultimately connects to the 36" line in Brent Street.

Runoff collected by drainage Area C is primarily sheet flow towards Brent Street, where it enters an existing catch basin. This catch basin connects to the existing 36" line in Brent Street.

Existing peak runoff calculations for the 10, 50 and 100 year storm events can be found in Appendix B. Table 1 summarizes the unit (Q per acre) runoff for the site in its existing condition.

q₁₀ (cfs/ac)	q₅₀ (cfs)	q₁₀₀ (cfs)
1.76	2.53	3.08

Table 1 – Existing Unit Run-off

Developed Conditions

Proposed improvements will consist of a new hospital wing, a small park, realignment of Cabrillo Drive and parking lot improvements. Since the proposed improvements are very similar to the existing condition peak runoff amounts site will remain unchanged from existing runoff amounts.

Runoff patterns from drainage Area A will remain unchanged from the pre-developed pattern. Re-development of this site however, will reduce the total area draining towards the catch basins located along Brent Street. The pre-developed area (comprising drainage Areas A and A1) was 24.2 ac, whereas the post-developed area is now 20.8 acres. The remaining runoff from the difference in area will now be directed towards drainage Area D. (Appendix C – Figure 2).

Runoff patterns from drainage Area B will remain unchanged from the pre-developed pattern. Re-development of this site however, will slightly increase the total runoff being collected by the 24" line located along the Alley (from approximately 40.5 cfs to 41.5 cfs for the 10 year storm). The capacity of this line was checked to ensure that this line is capable of handling the slight increase in runoff from within drainage Area B. Refer to Appendix G for this analysis.

Runoff from drainage Area C will still sheet flow towards the catch basin located in Brent Street. However, the total area contributing to this catch basin has significantly decreased, from 7.33 acres to 0.42 acres. Most of this area now falls within drainage Area D.

Runoff from drainage Area D will be directed to an on-site storm drain system which will connect directly to the existing 24-inch storm drain line in the alley. As this line does not have the capacity to handle the added flows portions will need to be up-sized to 36-inch. This line will still connect directly to the existing 36-inch line in Brent Street. Post developed peak runoff for the 36-inch in Brent Street will remain unchanged.

Figure 2, Appendix C shows the new watershed configuration produced by the re-development of this site. Figure 3, Appendix C shows the location of the new storm drain system. Stormwater peak runoffs for the re-developed site were calculated for the 10, 50 and 100 year storm events. Detailed calculations can be found in Appendix C.

Table 2 below summarizes the unit runoff of the developed site.

q₁₀ (cfs/ac)	q₅₀ (cfs/ac)	q₁₀₀ (cfs/ac)
1.76	2.53	3.08

Table 2 – Developed Unit Run-off

Since the pre-developed and post-developed peak runoff amounts will remain unchanged, no on-site detention is proposed for the re-development of this site. The total post developed peak runoff leaving the site for each storm event will be less than or equal to the pre-developed peak runoff quantities, for each storm event up to Q100.

Stormwater Treatment

The total Hospital site is approximately 17 acres and is 85% impervious. Re-development will disturb an approximate area of 5 acres. The proposed improvements include the addition of a park area, which will decrease the percent imperviousness of the total site to approximately 78%. Since the total disturbed area is less than 50% of the entire site and the percent imperviousness will decrease, treatment is only required for the re-developed area (5 acres) of the site.

The project will take advantage of several grassy areas throughout to allow for infiltration and treatment of rain water to comply with the County of Ventura MS4 permit. The required runoff will be diverted to the proposed treatment facilities for treatment and infiltration. Refer to Figure 4 of Appendix D for preliminary location of these treatment facilities.

These treatment facilities will be designed to provided treatment and infiltration of $\frac{3}{4}$ " of runoff from the re-developed site (e.g. for 5 acres the required volume that needs to be treated and infiltrated is $5 \text{ ac} * \frac{3}{4}" = 13,620 \text{ cf}$).

To identify treatment facilities, the site was divided into three areas (Figure 4 – Appendix D):

- Area Number 1, represents the new Hospital Wing
- Area Number 2, represents the new Park Area
- Area Number 3, represents the new parking area.

Preliminary volume calculations and location of the treatment facilities can be found in Appendix D. Refer to figure 4 of Appendix D for the location of each main treatment area and location of treatment facilities.

To prevent debris, sediment and trash from entering the proposed treatment facilities, all proposed storm drain inlets will be fitted with Kristar Flogard Plus storm drain filters. These filters will also capture oils and grease, metals, gasoline suspended solids and pathogens. Also, all proposed storm drain inlets will be properly signed with stenciling to

discourage illegal dumping. Refer to Appendix F for the description of these filters.

100 YEAR FLOOD ANALYSIS

The latest available FIRM Panel Number 060419 005B (Appendix E) shows that the proposed site falls within Flood Zone C. Zone C is an area of minimal flooding and has no special requirements for any of the proposed structures.

Based on the Ventura County Watershed Protection District's Jurisdiction Streams, the site is located outside the boundaries of a 100 year floodplain and is not within the limits of a County-jurisdiction (redline) or Federal Jurisdiction (blue line) watercourse. Refer to Jurisdiction Stream Exhibits within Appendix E.

CONCLUSION

The proposed storm drain system has been designed per the City of Ventura requirements, using County of Ventura standards as described in the Hydrology Manual. Post development storm flows will not increase over the existing flows, for each storm event. The proposed stormwater treatment measures meet the current NPDES requirements. By following City of Ventura guidelines the proposed structures should be protected during a 100 year storm event.



Prepared by: Jensen Design & Survey Inc.

Parcel boundaries on this exhibit are a graphical representation only. They should not be used in place of record boundary information and/or field survey data and do not accurately define property boundaries.

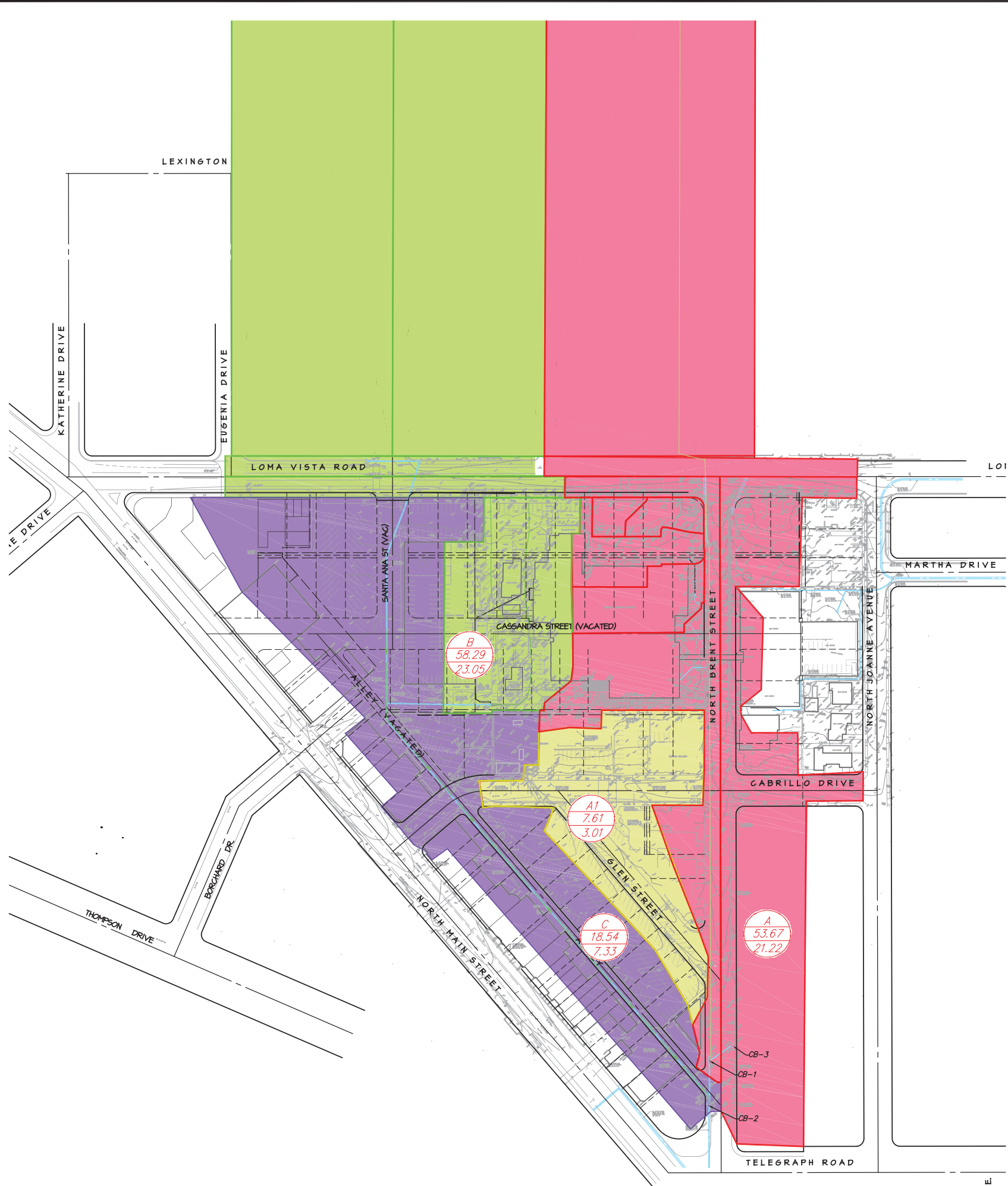
LOCATION MAP

1 inch = 400 feet



APPENDIX B

Existing Runoff Calculations and Exhibit



PEAK RUNOFF				
Watershed Name	Area	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	21.22	37.26	53.67	65.35
A1	3.01	5.29	7.61	9.27
B	23.05	40.48	58.29	70.99
C	7.33	12.87	18.54	22.57
total	54.61	95.90	138.11	168.19



EXISTING CONDITIONS



1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979

SCALE: 1"=---

J.N.: CMH1 4209

DATE: April 29, 2009

DWG. NAME: 4209 Existing Hydro Exhibit.dwg

HYDROLOGY EXHIBIT
FOR
Community Memorial Hospital

147 N. Brent Street
City of Oxnard

COUNTY OF VENTURA

STATE OF CALIFORNIA

Figure
1

VENTURA COUNTY WATERSHED PROTECTION DISTRICT
TIME OF CONCENTRATION

TC Program Version: 2.6.2008.11

Project: Community Memorial Hospital

Date: 6/25/2009 10:34:23 AM

Engineer: Karla V. Castillo

Consultant: Jensen Design & Survey, Inc

SUMMARY OF COMPUTATIONS

Watershed Name: Existing Watershed

Name	Zone	Storm	Soil	Area (acres)	TC (min)
Watershed A	K	10	4.00	21.4 / 21	15.895 / 16
Watershed A	K	25	4.00	21.4 / 21	13.809 / 14
Watershed A	K	50	4.00	21.4 / 21	12.527 / 13
Watershed A	K	100	4.00	21.4 / 21	10.838 / 11
Watershed B	K	10	4.00	3.0 / 3	11.026 / 11
Watershed B	K	25	4.00	3.0 / 3	10.774 / 11
Watershed B	K	50	4.00	3.0 / 3	7.195 / 7
Watershed B	K	100	4.00	3.0 / 3	7.098 / 7
Watershed C	K	10	4.00	23.2 / 23	16.761 / 17
Watershed C	K	25	4.00	23.2 / 23	14.627 / 15
Watershed C	K	50	4.00	23.2 / 23	13.238 / 13
Watershed C	K	100	4.00	23.2 / 23	11.672 / 12
Watershed D	K	10	4.00	7.3 / 7	11.516 / 12
Watershed D	K	25	4.00	7.3 / 7	10.961 / 11
Watershed D	K	50	4.00	7.3 / 7	7.664 / 8
Watershed D	K	100	4.00	7.3 / 7	7.538 / 8

Watershed Name: Existing Watershed

Sub-Area Name: Watershed A

Computing Tc for all rainfall frequencies for sub-area Watershed A...

Tc for frequency = 10.00: 15.895 Minutes

DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 15.895 min. = 16 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A

Total Area (ac): 21.44

Flood Zone: 2

Rainfall Zone: K

Storm Frequency (years): 10

Development Type: Commercial

Soil Type: 4.00

Percent Impervious: 80

SUB AREA OUTPUT

Intensity (in/hr): 1.976

C Total: 0.889

Sum Q Segments (cfs): 37.65

Q Total (cfs): 37.65

Sum Percent Area (%): 100.0

Sum of Flow Path Travel Times (sec): 953.67

Time of Concentration (min): 15.895

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath

FLOW PATH TRAVEL TIME (min): 8.2003

Flow Type: Overland

Length (ft): 200

Top Elevation (ft): 142.47

Bottom Elevation (ft): 140.47

Contributing Area (acres): 1.79

Percent of Sub-Area (%): 8.3

Overland Type: Valley

Development Type: Residential

Map Slope: 0.0100

Effective Slope: 0.0100

Q for Flow Path (cfs): 3.14

Avg Velocity (ft/s): 0.41

Passed Scour Check: N/A

DATA FOR FLOW PATH 2

Flow Path Name: FlowPath

FLOW PATH TRAVEL TIME (min): 4.6921

Flow Type: Street

Length (ft): 1223.03

Top Elevation (ft): 140.47

Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 51.3
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100
Q for Flow Path (cfs): 19.32
Q Top (cfs): 3.14
Q Bottom (cfs): 22.46
Velocity Top (ft/s): 2.19
Velocity Bottom (ft/s): 3.60
Avg Velocity (ft/s): 2.90
Wave Velocity (ft/s): 4.34
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.3289
Flow Type: Pipe
Length (ft): 165.339
Top Elevation (ft): 128.24
Bottom Elevation (ft): 127.22
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0062
Q for Flow Path (cfs): 0.86
Q Top (cfs): 22.46
Q Bottom (cfs): 23.32
Avg Velocity (ft/s): 6.97
Wave Velocity (ft/s): 8.38
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.6732
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.16
Percent of Sub-Area (%): 38.1
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 14.33
Q Top (cfs): 23.32
Q Bottom (cfs): 37.65
Velocity Top (ft/s): 3.84
Velocity Bottom (ft/s): 4.33
Avg Velocity (ft/s): 4.08
Wave Velocity (ft/s): 6.12

Tc for frequency = 25.00: 13.809 Minutes

DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 13.809 min. = 14 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A
Total Area (ac): 21.44
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.340
C Total: 0.896
Sum Q Segments (cfs): 44.93
Q Total (cfs): 44.93
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 828.56
Time of Concentration (min): 13.809

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.4575
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.47
Bottom Elevation (ft): 140.47
Contributing Area (acres): 1.79
Percent of Sub-Area (%): 8.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 3.75
Avg Velocity (ft/s): 0.52
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.4882
Flow Type: Street
Length (ft): 1223.03
Top Elevation (ft): 140.47
Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 51.3
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 23.05
Q Top (cfs): 3.75
Q Bottom (cfs): 26.80
Velocity Top (ft/s): 2.29
Velocity Bottom (ft/s): 3.76
Avg Velocity (ft/s): 3.03
Wave Velocity (ft/s): 4.54
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.3066
Flow Type: Pipe
Length (ft): 165.339
Top Elevation (ft): 128.24
Bottom Elevation (ft): 127.22
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 30
Used Pipe Diameter (in): 30
Manning's N: 0.013
Map Slope: 0.0062
Q for Flow Path (cfs): 1.03
Q Top (cfs): 26.80
Q Bottom (cfs): 27.83
Avg Velocity (ft/s): 7.35
Wave Velocity (ft/s): 8.99
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.5571
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.16
Percent of Sub-Area (%): 38.1
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 17.10
Q Top (cfs): 27.83
Q Bottom (cfs): 44.93
Velocity Top (ft/s): 4.01
Velocity Bottom (ft/s): 4.52
Avg Velocity (ft/s): 4.27
Wave Velocity (ft/s): 6.40

Tc for frequency = 50.00: 12.527 Minutes

DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 12.527 min. = 13 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A
Total Area (ac): 21.44
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.802
C Total: 0.903
Sum Q Segments (cfs): 54.23
Q Total (cfs): 54.23
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 751.60
Time of Concentration (min): 12.527

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.5194
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.47
Bottom Elevation (ft): 140.47
Contributing Area (acres): 1.79
Percent of Sub-Area (%): 8.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 4.53
Avg Velocity (ft/s): 0.60
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.2807
Flow Type: Street
Length (ft): 1223.03
Top Elevation (ft): 140.47
Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 51.3
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 27.83
Q Top (cfs): 4.53
Q Bottom (cfs): 32.35
Velocity Top (ft/s): 2.41
Velocity Bottom (ft/s): 3.94
Avg Velocity (ft/s): 3.17
Wave Velocity (ft/s): 4.76
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.2877
Flow Type: Pipe
Length (ft): 165.339
Top Elevation (ft): 128.24
Bottom Elevation (ft): 127.22
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0062
Q for Flow Path (cfs): 1.24
Q Top (cfs): 32.35
Q Bottom (cfs): 33.59
Avg Velocity (ft/s): 7.76
Wave Velocity (ft/s): 9.58
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.4388
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.16
Percent of Sub-Area (%): 38.1
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 20.64
Q Top (cfs): 33.59
Q Bottom (cfs): 54.23
Velocity Top (ft/s): 4.21
Velocity Bottom (ft/s): 4.74
Avg Velocity (ft/s): 4.47
Wave Velocity (ft/s): 6.71

Tc for frequency = 100.00: 10.838 Minutes

DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 10.838 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A
Total Area (ac): 21.44
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.387
C Total: 0.909
Sum Q Segments (cfs): 66.03
Q Total (cfs): 66.03
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 650.27
Time of Concentration (min): 10.838

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.1552
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.47
Bottom Elevation (ft): 140.47
Contributing Area (acres): 1.79
Percent of Sub-Area (%): 8.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 5.51
Avg Velocity (ft/s): 0.80
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.0739
Flow Type: Street
Length (ft): 1223.03
Top Elevation (ft): 140.47
Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 51.3
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 33.88
Q Top (cfs): 5.51
Q Bottom (cfs): 39.39
Velocity Top (ft/s): 2.53
Velocity Bottom (ft/s): 4.14
Avg Velocity (ft/s): 3.34
Wave Velocity (ft/s): 5.00
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.2877
Flow Type: Pipe
Length (ft): 165.339
Top Elevation (ft): 128.24
Bottom Elevation (ft): 127.22
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0062
Q for Flow Path (cfs): 1.51
Q Top (cfs): 39.39
Q Bottom (cfs): 40.90
Avg Velocity (ft/s): 7.97
Wave Velocity (ft/s): 9.58
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.3210
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.16
Percent of Sub-Area (%): 38.1
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 25.13
Q Top (cfs): 40.90
Q Bottom (cfs): 66.03
Velocity Top (ft/s): 4.42
Velocity Bottom (ft/s): 4.98
Avg Velocity (ft/s): 4.70
Wave Velocity (ft/s): 7.05

Project: Community Memorial Hospital
Date: 6/25/2009 10:34:23 AM
Engineer: Karla V. Castillo
Consultant: Jensen Design & Survey, Inc

Sub-Area Name: Watershed B
Computing Tc for all rainfall frequencies for sub-area Watershed B...

Tc for frequency = 10.00: 11.026 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 11.026 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed B
Total Area (ac): 3.01
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.396
C Total: 0.897
Sum Q Segments (cfs): 6.46
Q Total (cfs): 6.46
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 661.57
Time of Concentration (min): 11.026

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.6667
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 121.03
Bottom Elevation (ft): 120.2
Contributing Area (acres): 0.82
Percent of Sub-Area (%): 27.2
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0041
Effective Slope: 0.0041
Q for Flow Path (cfs): 1.76
Avg Velocity (ft/s): 0.50
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.3595
Flow Type: Channel

Length (ft): 660.45
Top Elevation (ft): 120.2
Bottom Elevation (ft): 116.6
Contributing Area (acres): 2.19
Percent of Sub-Area (%): 72.8
Bottom Width (ft): 3
Side Slope (H:V): 100
Manning's N: 0.013
Map Slope: 0.0055
Q for Flow Path (cfs): 4.70
Q Top (cfs): 1.76
Q Bottom (cfs): 6.46
Velocity Top (ft/s): 1.26
Velocity Bottom (ft/s): 1.78
Avg Velocity (ft/s): 1.52
Wave Velocity (ft/s): 2.52

Tc for frequency = 25.00: 10.774 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 10.774 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed B
Total Area (ac): 3.01
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.657
C Total: 0.901
Sum Q Segments (cfs): 7.20
Q Total (cfs): 7.20
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 646.46
Time of Concentration (min): 10.774

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.5219
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 121.03
Bottom Elevation (ft): 120.2
Contributing Area (acres): 0.82
Percent of Sub-Area (%): 27.2
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0041
Effective Slope: 0.0041
Q for Flow Path (cfs): 1.96
Avg Velocity (ft/s): 0.51
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.2525
Flow Type: Channel
Length (ft): 660.45
Top Elevation (ft): 120.2
Bottom Elevation (ft): 116.6
Contributing Area (acres): 2.19
Percent of Sub-Area (%): 72.8
Bottom Width (ft): 3
Side Slope (H:V): 100
Manning's N: 0.013

Map Slope: 0.0055
Q for Flow Path (cfs): 5.24
Q Top (cfs): 1.96
Q Bottom (cfs): 7.20
Velocity Top (ft/s): 1.31
Velocity Bottom (ft/s): 1.81
Avg Velocity (ft/s): 1.56
Wave Velocity (ft/s): 2.59

Tc for frequency = 50.00: 7.195 Minutes

DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 7.195 min. = 7 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed B
Total Area (ac): 3.01
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.771
C Total: 0.912
Sum Q Segments (cfs): 10.36
Q Total (cfs): 10.36
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 431.71
Time of Concentration (min): 7.195

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 3.3333
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 121.03
Bottom Elevation (ft): 120.2
Contributing Area (acres): 0.82
Percent of Sub-Area (%): 27.2
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0041
Effective Slope: 0.0041
Q for Flow Path (cfs): 2.82
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 3.8618
Flow Type: Channel
Length (ft): 660.45
Top Elevation (ft): 120.2
Bottom Elevation (ft): 116.6
Contributing Area (acres): 2.19
Percent of Sub-Area (%): 72.8
Bottom Width (ft): 3
Side Slope (H:V): 100
Manning's N: 0.013

Map Slope: 0.0055
Q for Flow Path (cfs): 7.54
Q Top (cfs): 2.82
Q Bottom (cfs): 10.36
Velocity Top (ft/s): 1.44
Velocity Bottom (ft/s): 2.00
Avg Velocity (ft/s): 1.72
Wave Velocity (ft/s): 2.85

Tc for frequency = 100.00: 7.098 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 7.098 min. = 7 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed B
Total Area (ac): 3.01
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 4.226
C Total: 0.915
Sum Q Segments (cfs): 11.64
Q Total (cfs): 11.64
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 425.85
Time of Concentration (min): 7.098

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 3.3333
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 121.03
Bottom Elevation (ft): 120.2
Contributing Area (acres): 0.82
Percent of Sub-Area (%): 27.2
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0041
Effective Slope: 0.0041
Q for Flow Path (cfs): 3.17
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 3.7642
Flow Type: Channel
Length (ft): 660.45
Top Elevation (ft): 120.2
Bottom Elevation (ft): 116.6
Contributing Area (acres): 2.19
Percent of Sub-Area (%): 72.8
Bottom Width (ft): 3
Side Slope (H:V): 100
Manning's N: 0.013

Map Slope: 0.0055
Q for Flow Path (cfs): 8.47
Q Top (cfs): 3.17
Q Bottom (cfs): 11.64
Velocity Top (ft/s): 1.47
Velocity Bottom (ft/s): 2.05
Avg Velocity (ft/s): 1.76
Wave Velocity (ft/s): 2.92

Project: Community Memorial Hospital
Date: 6/25/2009 10:34:23 AM
Engineer: Karla V. Castillo
Consultant: Jensen Design & Survey, Inc

Sub-Area Name: Watershed C
Computing Tc for all rainfall frequencies for sub-area Watershed C...

Tc for frequency = 10.00: 16.761 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 16.761 min. = 17 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 23.18
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.916
C Total: 0.887
Sum Q Segments (cfs): 39.40
Q Total (cfs): 39.40
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 1,005.66
Time of Concentration (min): 16.761

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 8.2003
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 5.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 2.07
Avg Velocity (ft/s): 0.41
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.1110
Flow Type: Street

Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 39.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100
Q for Flow Path (cfs): 15.36
Q Top (cfs): 2.07
Q Bottom (cfs): 17.44
Velocity Top (ft/s): 1.98
Velocity Bottom (ft/s): 3.38
Avg Velocity (ft/s): 2.68
Wave Velocity (ft/s): 4.02
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1498
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 24
Used Pipe Diameter (in): 24
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 0.92
Q Top (cfs): 17.44
Q Bottom (cfs): 18.36
Avg Velocity (ft/s): 8.88
Wave Velocity (ft/s): 11.26
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0847
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 41.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 16.40
Q Top (cfs): 18.36
Q Bottom (cfs): 34.76
Avg Velocity (ft/s): 9.79
Wave Velocity (ft/s): 12.20
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5976
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6
Percent of Sub-Area (%): 2.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 30
Used Pipe Diameter (in): 30
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.02
Q Top (cfs): 34.76
Q Bottom (cfs): 35.78
Avg Velocity (ft/s): 9.38
Wave Velocity (ft/s): 11.47
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.6176
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 2.13
Percent of Sub-Area (%): 9.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 3.62
Q Top (cfs): 35.78
Q Bottom (cfs): 39.40
Avg Velocity (ft/s): 8.40
Wave Velocity (ft/s): 10.28

Tc for frequency = 25.00: 14.627 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 14.627 min. = 15 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 23.18
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.256
C Total: 0.894
Sum Q Segments (cfs): 46.75
Q Total (cfs): 46.75
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 877.61
Time of Concentration (min): 14.627

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.4575
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 5.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 2.46
Avg Velocity (ft/s): 0.52
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.8535
Flow Type: Street
Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 39.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 18.23
Q Top (cfs): 2.46
Q Bottom (cfs): 20.69
Velocity Top (ft/s): 2.06
Velocity Bottom (ft/s): 3.53
Avg Velocity (ft/s): 2.79
Wave Velocity (ft/s): 4.19
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1498
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 24
Used Pipe Diameter (in): 24
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 1.09
Q Top (cfs): 20.69
Q Bottom (cfs): 21.78
Avg Velocity (ft/s): 9.21
Wave Velocity (ft/s): 11.26
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0789
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 41.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 30
Used Pipe Diameter (in): 30
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 19.46
Q Top (cfs): 21.78
Q Bottom (cfs): 41.25
Avg Velocity (ft/s): 10.22
Wave Velocity (ft/s): 13.08
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5608
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6

Percent of Sub-Area (%): 2.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.21
Q Top (cfs): 41.25
Q Bottom (cfs): 42.46
Avg Velocity (ft/s): 9.90
Wave Velocity (ft/s): 12.22
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.5265
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 2.13
Percent of Sub-Area (%): 9.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 4.30
Q Top (cfs): 42.46
Q Bottom (cfs): 46.75
Avg Velocity (ft/s): 8.83
Wave Velocity (ft/s): 10.89

Tc for frequency = 50.00: 13.238 Minutes

DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 13.238 min. = 13 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 23.18
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.802
C Total: 0.903
Sum Q Segments (cfs): 58.64
Q Total (cfs): 58.64
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 794.26
Time of Concentration (min): 13.238

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.5194
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 5.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 3.09
Avg Velocity (ft/s): 0.60
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.5294
Flow Type: Street
Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 39.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 22.87
Q Top (cfs): 3.09
Q Bottom (cfs): 25.95
Velocity Top (ft/s): 2.18
Velocity Bottom (ft/s): 3.73
Avg Velocity (ft/s): 2.96
Wave Velocity (ft/s): 4.44
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1384
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 1.37
Q Top (cfs): 25.95
Q Bottom (cfs): 27.32
Avg Velocity (ft/s): 9.78
Wave Velocity (ft/s): 12.18
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0741
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 41.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 24.41
Q Top (cfs): 27.32
Q Bottom (cfs): 51.73
Avg Velocity (ft/s): 10.83
Wave Velocity (ft/s): 13.94
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5292
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6

Percent of Sub-Area (%): 2.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.52
Q Top (cfs): 51.73
Q Bottom (cfs): 53.25
Avg Velocity (ft/s): 10.49
Wave Velocity (ft/s): 12.95
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.4471
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 2.13
Percent of Sub-Area (%): 9.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 39
Used Pipe Diameter (in): 39
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 5.39
Q Top (cfs): 53.25
Q Bottom (cfs): 58.64
Avg Velocity (ft/s): 9.31
Wave Velocity (ft/s): 11.49

Tc for frequency = 100.00: 11.672 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 11.672 min. = 12 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 23.18
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.230
C Total: 0.908
Sum Q Segments (cfs): 67.96
Q Total (cfs): 67.96
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 700.32
Time of Concentration (min): 11.672

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.1552
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 5.3
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 3.58
Avg Velocity (ft/s): 0.80
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.3279
Flow Type: Street
Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 39.0
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 26.50
Q Top (cfs): 3.58
Q Bottom (cfs): 30.08
Velocity Top (ft/s): 2.27
Velocity Bottom (ft/s): 3.87
Avg Velocity (ft/s): 3.07
Wave Velocity (ft/s): 4.61
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1384
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 1.58
Q Top (cfs): 30.08
Q Bottom (cfs): 31.66
Avg Velocity (ft/s): 10.05
Wave Velocity (ft/s): 12.18
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0741
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 41.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 28.29
Q Top (cfs): 31.66
Q Bottom (cfs): 59.96
Avg Velocity (ft/s): 11.19
Wave Velocity (ft/s): 13.94
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5292
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6

Percent of Sub-Area (%): 2.6
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.76
Q Top (cfs): 59.96
Q Bottom (cfs): 61.72
Avg Velocity (ft/s): 10.68
Wave Velocity (ft/s): 12.95
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.4471
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 2.13
Percent of Sub-Area (%): 9.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 39
Used Pipe Diameter (in): 39
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 6.24
Q Top (cfs): 61.72
Q Bottom (cfs): 67.96
Avg Velocity (ft/s): 9.49
Wave Velocity (ft/s): 11.49

Project: Community Memorial Hospital
Date: 6/25/2009 10:34:23 AM
Engineer: Karla V. Castillo
Consultant: Jensen Design & Survey, Inc

Sub-Area Name: Watershed D
Computing Tc for all rainfall frequencies for sub-area Watershed D...

Tc for frequency = 10.00: 11.516 Minutes
DATA FOR SUB AREA 4

SUB AREA TIME OF CONCENTRATION: 11.516 min. = 12 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 7.33
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.289
C Total: 0.895
Sum Q Segments (cfs): 15.01
Q Total (cfs): 15.01
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 690.94
Time of Concentration (min): 11.516

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.6667
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 130.1
Bottom Elevation (ft): 126.2
Contributing Area (acres): 1.57
Percent of Sub-Area (%): 21.4
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0195
Effective Slope: 0.0195
Q for Flow Path (cfs): 3.21
Avg Velocity (ft/s): 0.50
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.8490
Flow Type: Street

Length (ft): 1178.46
Top Elevation (ft): 126.2
Bottom Elevation (ft): 114.74
Contributing Area (acres): 5.76
Percent of Sub-Area (%): 78.6
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0097
Q for Flow Path (cfs): 11.80
Q Top (cfs): 3.21
Q Bottom (cfs): 15.01
Velocity Top (ft/s): 2.18
Velocity Bottom (ft/s): 3.22
Avg Velocity (ft/s): 2.70
Wave Velocity (ft/s): 4.05

Tc for frequency = 25.00: 10.961 Minutes

DATA FOR SUB AREA 4

SUB AREA TIME OF CONCENTRATION: 10.961 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 7.33
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.657
C Total: 0.901
Sum Q Segments (cfs): 17.54
Q Total (cfs): 17.54
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 657.64
Time of Concentration (min): 10.961

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.2982
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 130.1
Bottom Elevation (ft): 126.2
Contributing Area (acres): 1.57
Percent of Sub-Area (%): 21.4
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0195
Effective Slope: 0.0195
Q for Flow Path (cfs): 3.76
Avg Velocity (ft/s): 0.53
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.6625
Flow Type: Street
Length (ft): 1178.46
Top Elevation (ft): 126.2
Bottom Elevation (ft): 114.74
Contributing Area (acres): 5.76
Percent of Sub-Area (%): 78.6
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0097

Q for Flow Path (cfs): 13.79
Q Top (cfs): 3.76
Q Bottom (cfs): 17.54
Velocity Top (ft/s): 2.27
Velocity Bottom (ft/s): 3.35
Avg Velocity (ft/s): 2.81
Wave Velocity (ft/s): 4.21

Tc for frequency = 50.00: 7.664 Minutes
DATA FOR SUB AREA 4

SUB AREA TIME OF CONCENTRATION: 7.664 min. = 8 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 7.33
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.525
C Total: 0.911
Sum Q Segments (cfs): 23.53
Q Total (cfs): 23.53
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 459.84
Time of Concentration (min): 7.664

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 3.3333
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 130.1
Bottom Elevation (ft): 126.2
Contributing Area (acres): 1.57
Percent of Sub-Area (%): 21.4
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0195
Effective Slope: 0.0195
Q for Flow Path (cfs): 5.04
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.3307
Flow Type: Street
Length (ft): 1178.46
Top Elevation (ft): 126.2
Bottom Elevation (ft): 114.74
Contributing Area (acres): 5.76
Percent of Sub-Area (%): 78.6
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0097

Q for Flow Path (cfs): 18.49
Q Top (cfs): 5.04
Q Bottom (cfs): 23.53
Velocity Top (ft/s): 2.44
Velocity Bottom (ft/s): 3.60
Avg Velocity (ft/s): 3.02
Wave Velocity (ft/s): 4.54

Tc for frequency = 100.00: 7.538 Minutes

DATA FOR SUB AREA 4

SUB AREA TIME OF CONCENTRATION: 7.538 min. = 8 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 7.33
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.953
C Total: 0.914
Sum Q Segments (cfs): 26.47
Q Total (cfs): 26.47
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 452.25
Time of Concentration (min): 7.538

DATA FOR FLOW PATH 1

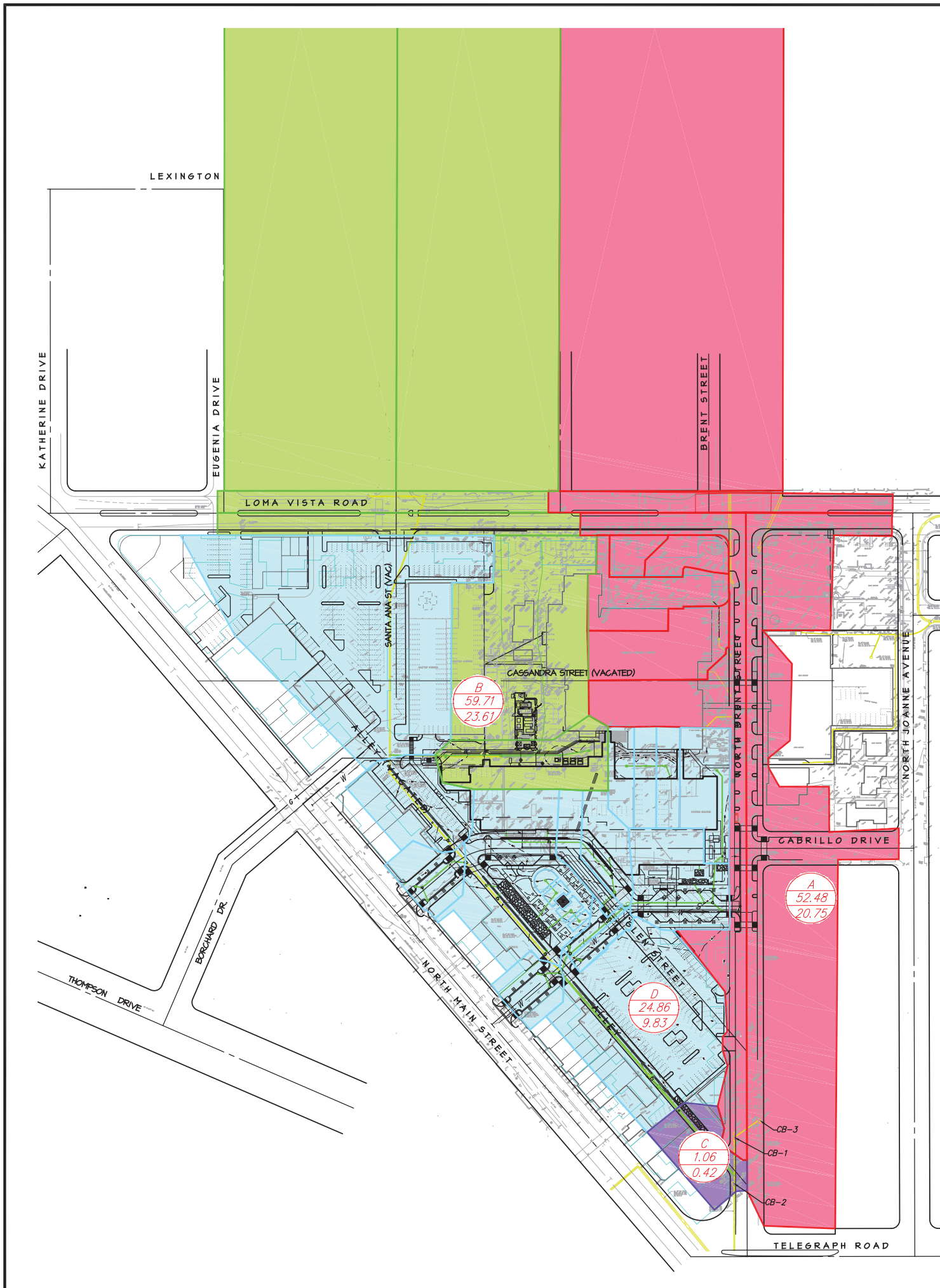
Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 3.3333
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 130.1
Bottom Elevation (ft): 126.2
Contributing Area (acres): 1.57
Percent of Sub-Area (%): 21.4
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0195
Effective Slope: 0.0195
Q for Flow Path (cfs): 5.67
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.2042
Flow Type: Street
Length (ft): 1178.46
Top Elevation (ft): 126.2
Bottom Elevation (ft): 114.74
Contributing Area (acres): 5.76
Percent of Sub-Area (%): 78.6
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0097

Q for Flow Path (cfs): 20.80
Q Top (cfs): 5.67
Q Bottom (cfs): 26.47
Velocity Top (ft/s): 2.52
Velocity Bottom (ft/s): 3.71
Avg Velocity (ft/s): 3.11
Wave Velocity (ft/s): 4.67

APPENDIX C

Developed Runoff Calculations and Exhibit



PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	20.75	36.44	52.48	63.90
B	23.61	41.46	59.71	72.71
C	0.42	0.74	1.06	1.29
D	9.83	17.26	24.86	30.27
total	54.61	95.90	138.11	168.19

- Watershed A - Sheet flow into CB1 & CB3 @ Brent Street
- Watershed B - Flow into 24" SD line in Alley
- Watershed C - Sheet Flow into CB2 @ Brent Street
- Watershed D - Flow into on-site SD line that connects to the up-sized 36" line along the Alley.

LEGEND

- DRAINAGE AREA A - SHEET FLOW INTO CB1 & CB3 ALONG BRENT STREET
- DRAINAGE AREA B - FLOW INTO 24" SD LINE IN ALLEY
- DRAINAGE AREA C - SHEET FLOW INTO CB2 ALONG BRENT STREET
- DRAINAGE AREA D - FLOW INTO NEW SD SYSTEM.

- WATERSHED NAME
- WATERSHED AREA (ac)
- Q50 (cfs)

- EXISTING STORMDRAIN LINE
- PROPOSED STORMDRAIN LINE

DEVELOPED CONDITIONS

1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979

COUNTY OF VENTURA

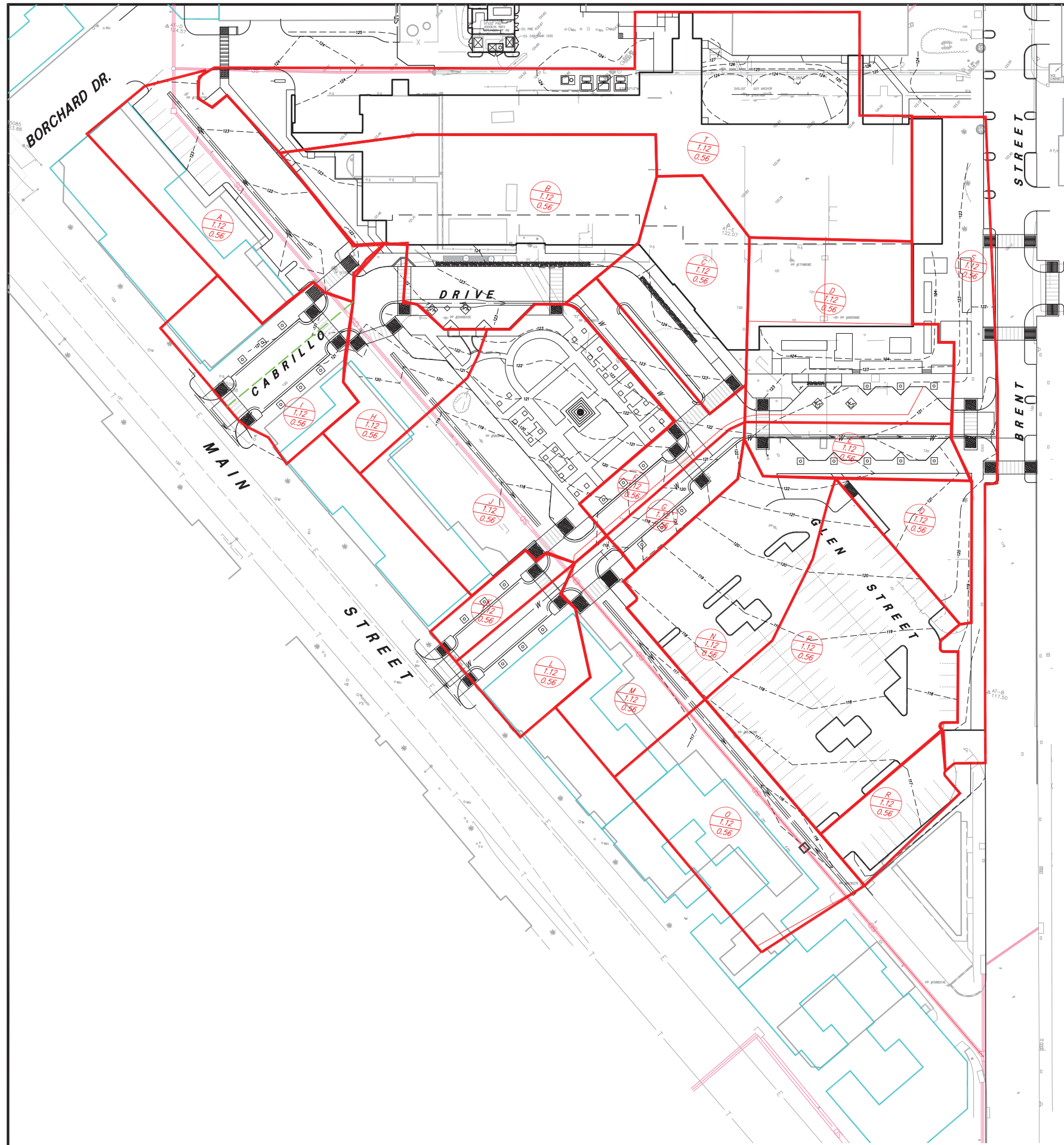
STATE OF CALIFORNIA

HYDROLOGY EXHIBIT
FOR
Community Memorial Hospital

147 N. Brent Street
City of Oxnard

Figure 2

J:\CMH\4209 [Fig] Exhibit 6-25-2009.dwg Mar 08, 2010, 10:30am kcs@jds



DEVELOPED CONDITIONS

Watershed Name	AREA (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	0.44	0.66	1.22	1.37
B	0.66	0.98	1.83	2.05
C	0.29	0.43	0.81	0.90
D	0.45	0.67	1.25	1.40
E	0.15	0.22	0.42	0.47
F	0.17	0.25	0.47	0.53
G	0.10	0.15	0.28	0.31
H	0.24	0.36	0.67	0.75
I1	0.15	0.22	0.42	0.47
I2	0.13	0.19	0.36	0.40
J	0.65	0.97	1.81	2.02
K	0.08	0.12	0.22	0.25
L	0.15	0.22	0.42	0.47
M	0.23	0.34	0.64	0.72
N	0.92	1.37	2.56	2.86
O	0.37	0.55	1.03	1.15
P	0.61	0.92	1.71	1.91
Q	0.14	0.21	0.39	0.44
R	0.12	0.18	0.33	0.37
S	0.40	0.60	1.11	1.24
T	0.97	1.44	2.69	3.02
TOTAL	7.42	11.05	20.62	23.10

LEGEND

- Watershed Name
- Q50 (cfs)
- Area (ac)
- Watershed Boundary
- Existing Stormdrain Line
- Proposed Stormdrain Line
- Preliminary Treatment Vault Locations

DEVELOPED CONDITIONS - WATERSHEDS

1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979
www.jdsurvey.com

SCALE: 1"=xx'

DATE: APRIL 17, 2009

J.N.: CMH1 4209

DWG. NAME: 4209 Developed Hydro Exhibit_recov

HYDROLOGY EXHIBIT
FOR
Community Memorial Hospital

147 N. Brent Street
City of Ventura

FIGURE
3

COUNTY OF VENTURA

STATE OF CALIFORNIA

VENTURA COUNTY WATERSHED PROTECTION DISTRICT
TIME OF CONCENTRATION

TC Program Version: 2.6.2008.11

Project: Community Memorial Hospital

Date: 6/25/2009 10:34:23 AM

Engineer: Karla V. Castillo

Consultant: Jensen Design & Survey, Inc

SUMMARY OF COMPUTATIONS

Watershed Name: Developed Watershed

Name	Zone	Storm	Soil	Area (acres)	TC (min)
Watershed A	K	10	4.00	21.7 / 22	15.561 / 16
Watershed A	K	25	4.00	21.7 / 22	13.429 / 13
Watershed A	K	50	4.00	21.7 / 22	12.174 / 12
Watershed A	K	100	4.00	21.7 / 22	10.546 / 11
Watershed C	K	10	4.00	32.5 / 32	16.670 / 17
Watershed C	K	25	4.00	32.5 / 32	14.548 / 15
Watershed C	K	50	4.00	32.5 / 32	13.168 / 13
Watershed C	K	100	4.00	32.5 / 32	11.415 / 11
Watershed D	K	10	4.00	0.4 / 0	5.896 / 6
Watershed D	K	25	4.00	0.4 / 0	5.735 / 6
Watershed D	K	50	4.00	0.4 / 0	TC ERROR
Watershed D	K	100	4.00	0.4 / 0	TC ERROR

Watershed Name: Developed Watershed

Sub-Area Name: Watershed A

Computing Tc for all rainfall frequencies for sub-area Watershed A...

Tc for frequency = 10.00: 15.561 Minutes

DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 15.561 min. = 16 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A

Total Area (ac): 21.71

Flood Zone: 2

Rainfall Zone: K

Storm Frequency (years): 10

Development Type: Commercial

Soil Type: 4.00

Percent Impervious: 80

SUB AREA OUTPUT

Intensity (in/hr): 1.976

C Total: 0.889

Sum Q Segments (cfs): 38.13

Q Total (cfs): 38.13

Sum Percent Area (%): 100.0

Sum of Flow Path Travel Times (sec): 933.67

Time of Concentration (min): 15.561

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath

FLOW PATH TRAVEL TIME (min): 8.2003

Flow Type: Overland

Length (ft): 200

Top Elevation (ft): 142.47

Bottom Elevation (ft): 140.47

Contributing Area (acres): 1.79

Percent of Sub-Area (%): 8.2

Overland Type: Valley

Development Type: Residential

Map Slope: 0.0100

Effective Slope: 0.0100

Q for Flow Path (cfs): 3.14

Avg Velocity (ft/s): 0.41

Passed Scour Check: N/A

DATA FOR FLOW PATH 2

Flow Path Name: FlowPath

FLOW PATH TRAVEL TIME (min): 4.6921

Flow Type: Street

Length (ft): 1223.03

Top Elevation (ft): 140.47

Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 50.7
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100
Q for Flow Path (cfs): 19.32
Q Top (cfs): 3.14
Q Bottom (cfs): 22.46
Velocity Top (ft/s): 2.19
Velocity Bottom (ft/s): 3.60
Avg Velocity (ft/s): 2.90
Wave Velocity (ft/s): 4.34
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0000
Flow Type: Pipe
Length (ft): 128.24
Top Elevation (ft): 127.22
Bottom Elevation (ft): 165.339
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 15
Used Pipe Diameter (in): 0
Manning's N: 0.013
Map Slope: -0.2972
Q for Flow Path (cfs): 0.86
Q Top (cfs): 22.46
Q Bottom (cfs): 23.32
Avg Velocity (ft/s): 0.00
Wave Velocity (ft/s): 0.00
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.6687
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.43
Percent of Sub-Area (%): 38.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 14.81
Q Top (cfs): 23.32
Q Bottom (cfs): 38.13
Velocity Top (ft/s): 3.84
Velocity Bottom (ft/s): 4.34
Avg Velocity (ft/s): 4.09
Wave Velocity (ft/s): 6.13

Tc for frequency = 25.00: 13.429 Minutes

DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 13.429 min. = 13 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A
Total Area (ac): 21.71
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.430
C Total: 0.897
Sum Q Segments (cfs): 47.32
Q Total (cfs): 47.32
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 805.75
Time of Concentration (min): 13.429

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.4575
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.47
Bottom Elevation (ft): 140.47
Contributing Area (acres): 1.79
Percent of Sub-Area (%): 8.2
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 3.90
Avg Velocity (ft/s): 0.52
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.4440
Flow Type: Street
Length (ft): 1223.03
Top Elevation (ft): 140.47
Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 50.7
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 23.98
Q Top (cfs): 3.90
Q Bottom (cfs): 27.88
Velocity Top (ft/s): 2.32
Velocity Bottom (ft/s): 3.80
Avg Velocity (ft/s): 3.06
Wave Velocity (ft/s): 4.59
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0000
Flow Type: Pipe
Length (ft): 128.24
Top Elevation (ft): 127.22
Bottom Elevation (ft): 165.339
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 15
Used Pipe Diameter (in): 0
Manning's N: 0.013
Map Slope: -0.2972
Q for Flow Path (cfs): 1.07
Q Top (cfs): 27.88
Q Bottom (cfs): 28.95
Avg Velocity (ft/s): 0.00
Wave Velocity (ft/s): 0.00
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.5276
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.43
Percent of Sub-Area (%): 38.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 18.37
Q Top (cfs): 28.95
Q Bottom (cfs): 47.32
Velocity Top (ft/s): 4.05
Velocity Bottom (ft/s): 4.58
Avg Velocity (ft/s): 4.32
Wave Velocity (ft/s): 6.48

Tc for frequency = 50.00: 12.174 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 12.174 min. = 12 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A
Total Area (ac): 21.71
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.902
C Total: 0.904
Sum Q Segments (cfs): 56.96
Q Total (cfs): 56.96
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 730.41
Time of Concentration (min): 12.174

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.5194
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.47
Bottom Elevation (ft): 140.47
Contributing Area (acres): 1.79
Percent of Sub-Area (%): 8.2
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 4.70
Avg Velocity (ft/s): 0.60
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.2416
Flow Type: Street
Length (ft): 1223.03
Top Elevation (ft): 140.47
Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 50.7
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 28.86
Q Top (cfs): 4.70
Q Bottom (cfs): 33.55
Velocity Top (ft/s): 2.43
Velocity Bottom (ft/s): 3.98
Avg Velocity (ft/s): 3.20
Wave Velocity (ft/s): 4.81
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0000
Flow Type: Pipe
Length (ft): 128.24
Top Elevation (ft): 127.22
Bottom Elevation (ft): 165.339
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 15
Used Pipe Diameter (in): 0
Manning's N: 0.013
Map Slope: -0.2972
Q for Flow Path (cfs): 1.29
Q Top (cfs): 33.55
Q Bottom (cfs): 34.84
Avg Velocity (ft/s): 0.00
Wave Velocity (ft/s): 0.00
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.4125
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.43
Percent of Sub-Area (%): 38.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 22.12
Q Top (cfs): 34.84
Q Bottom (cfs): 56.96
Velocity Top (ft/s): 4.24
Velocity Bottom (ft/s): 4.80
Avg Velocity (ft/s): 4.52
Wave Velocity (ft/s): 6.78

Tc for frequency = 100.00: 10.546 Minutes
DATA FOR SUB AREA 1

SUB AREA TIME OF CONCENTRATION: 10.546 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed A
Total Area (ac): 21.71
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.387
C Total: 0.909
Sum Q Segments (cfs): 66.87
Q Total (cfs): 66.87
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 632.78
Time of Concentration (min): 10.546

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.1552
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.47
Bottom Elevation (ft): 140.47
Contributing Area (acres): 1.79
Percent of Sub-Area (%): 8.2
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 5.51
Avg Velocity (ft/s): 0.80
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.0739
Flow Type: Street
Length (ft): 1223.03
Top Elevation (ft): 140.47
Bottom Elevation (ft): 128.24
Contributing Area (acres): 11
Percent of Sub-Area (%): 50.7
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 33.88
Q Top (cfs): 5.51
Q Bottom (cfs): 39.39
Velocity Top (ft/s): 2.53
Velocity Bottom (ft/s): 4.14
Avg Velocity (ft/s): 3.34
Wave Velocity (ft/s): 5.00
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0000
Flow Type: Pipe
Length (ft): 128.24
Top Elevation (ft): 127.22
Bottom Elevation (ft): 165.339
Contributing Area (acres): 0.49
Percent of Sub-Area (%): 2.3
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 15
Used Pipe Diameter (in): 0
Manning's N: 0.013
Map Slope: -0.2972
Q for Flow Path (cfs): 1.51
Q Top (cfs): 39.39
Q Bottom (cfs): 40.90
Avg Velocity (ft/s): 0.00
Wave Velocity (ft/s): 0.00
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.3171
Flow Type: Street
Length (ft): 982.05
Top Elevation (ft): 127.22
Bottom Elevation (ft): 115.87
Contributing Area (acres): 8.43
Percent of Sub-Area (%): 38.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0116
Q for Flow Path (cfs): 25.96
Q Top (cfs): 40.90
Q Bottom (cfs): 66.87
Velocity Top (ft/s): 4.42
Velocity Bottom (ft/s): 5.00
Avg Velocity (ft/s): 4.71
Wave Velocity (ft/s): 7.06

Project: Community Memorial Hospital
Date: 6/25/2009 10:34:23 AM
Engineer: Karla V. Castillo
Consultant: Jensen Design & Survey, Inc

Sub-Area Name: Watershed C
Computing Tc for all rainfall frequencies for sub-area Watershed C...

Tc for frequency = 10.00: 16.670 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 16.670 min. = 17 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 32.48
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 1.916
C Total: 0.887
Sum Q Segments (cfs): 55.20
Q Total (cfs): 55.20
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 1,000.19
Time of Concentration (min): 16.670

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 8.2003
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 3.8
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 2.07
Avg Velocity (ft/s): 0.41
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.1110
Flow Type: Street

Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 27.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100
Q for Flow Path (cfs): 15.36
Q Top (cfs): 2.07
Q Bottom (cfs): 17.44
Velocity Top (ft/s): 1.98
Velocity Bottom (ft/s): 3.38
Avg Velocity (ft/s): 2.68
Wave Velocity (ft/s): 4.02
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1498
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 1.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 24
Used Pipe Diameter (in): 24
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 0.92
Q Top (cfs): 17.44
Q Bottom (cfs): 18.36
Avg Velocity (ft/s): 8.88
Wave Velocity (ft/s): 11.26
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0847
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 29.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 16.40
Q Top (cfs): 18.36
Q Bottom (cfs): 34.76
Avg Velocity (ft/s): 9.79
Wave Velocity (ft/s): 12.20
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5976
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6
Percent of Sub-Area (%): 1.8
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 30
Used Pipe Diameter (in): 30
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.02
Q Top (cfs): 34.76
Q Bottom (cfs): 35.78
Avg Velocity (ft/s): 9.38
Wave Velocity (ft/s): 11.47
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.5265
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 11.43
Percent of Sub-Area (%): 35.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 19.43
Q Top (cfs): 35.78
Q Bottom (cfs): 55.20
Avg Velocity (ft/s): 8.83
Wave Velocity (ft/s): 10.89

Tc for frequency = 25.00: 14.548 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 14.548 min. = 15 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 32.48
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.256
C Total: 0.894
Sum Q Segments (cfs): 65.51
Q Total (cfs): 65.51
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 872.86
Time of Concentration (min): 14.548

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 6.4575
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 3.8
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 2.46
Avg Velocity (ft/s): 0.52
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.8535
Flow Type: Street
Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 27.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 18.23
Q Top (cfs): 2.46
Q Bottom (cfs): 20.69
Velocity Top (ft/s): 2.06
Velocity Bottom (ft/s): 3.53
Avg Velocity (ft/s): 2.79
Wave Velocity (ft/s): 4.19
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1498
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 1.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 24
Used Pipe Diameter (in): 24
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 1.09
Q Top (cfs): 20.69
Q Bottom (cfs): 21.78
Avg Velocity (ft/s): 9.21
Wave Velocity (ft/s): 11.26
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0789
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 29.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 30
Used Pipe Diameter (in): 30
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 19.46
Q Top (cfs): 21.78
Q Bottom (cfs): 41.25
Avg Velocity (ft/s): 10.22
Wave Velocity (ft/s): 13.08
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5608
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6

Percent of Sub-Area (%): 1.8
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.21
Q Top (cfs): 41.25
Q Bottom (cfs): 42.46
Avg Velocity (ft/s): 9.90
Wave Velocity (ft/s): 12.22
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.4471
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 11.43
Percent of Sub-Area (%): 35.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 39
Used Pipe Diameter (in): 39
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 23.05
Q Top (cfs): 42.46
Q Bottom (cfs): 65.51
Avg Velocity (ft/s): 9.27
Wave Velocity (ft/s): 11.49

Tc for frequency = 50.00: 13.168 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 13.168 min. = 13 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 32.48
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 2.802
C Total: 0.903
Sum Q Segments (cfs): 82.16
Q Total (cfs): 82.16
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 790.07
Time of Concentration (min): 13.168

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.5194
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 3.8
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 3.09
Avg Velocity (ft/s): 0.60
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.5294
Flow Type: Street
Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 27.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 22.87
Q Top (cfs): 3.09
Q Bottom (cfs): 25.95
Velocity Top (ft/s): 2.18
Velocity Bottom (ft/s): 3.73
Avg Velocity (ft/s): 2.96
Wave Velocity (ft/s): 4.44
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1384
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 1.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 1.37
Q Top (cfs): 25.95
Q Bottom (cfs): 27.32
Avg Velocity (ft/s): 9.78
Wave Velocity (ft/s): 12.18
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0741
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 29.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 33
Used Pipe Diameter (in): 33
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 24.41
Q Top (cfs): 27.32
Q Bottom (cfs): 51.73
Avg Velocity (ft/s): 10.83
Wave Velocity (ft/s): 13.94
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5292
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6

Percent of Sub-Area (%): 1.8
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.52
Q Top (cfs): 51.73
Q Bottom (cfs): 53.25
Avg Velocity (ft/s): 10.49
Wave Velocity (ft/s): 12.95
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.3774
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 11.43
Percent of Sub-Area (%): 35.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 42
Used Pipe Diameter (in): 42
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 28.91
Q Top (cfs): 53.25
Q Bottom (cfs): 82.16
Avg Velocity (ft/s): 9.78
Wave Velocity (ft/s): 12.07

Tc for frequency = 100.00: 11.415 Minutes
DATA FOR SUB AREA 2

SUB AREA TIME OF CONCENTRATION: 11.415 min. = 11 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed C
Total Area (ac): 32.48
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.387
C Total: 0.909
Sum Q Segments (cfs): 100.04
Q Total (cfs): 100.04
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 684.91
Time of Concentration (min): 11.415

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 4.1552
Flow Type: Overland
Length (ft): 200
Top Elevation (ft): 142.65
Bottom Elevation (ft): 140.65
Contributing Area (acres): 1.22
Percent of Sub-Area (%): 3.8
Overland Type: Valley
Development Type: Residential
Map Slope: 0.0100
Effective Slope: 0.0100
Q for Flow Path (cfs): 3.76
Avg Velocity (ft/s): 0.80
Passed Scour Check: N/A
DATA FOR FLOW PATH 2

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.2623
Flow Type: Street
Length (ft): 1472.19
Top Elevation (ft): 140.65
Bottom Elevation (ft): 125.92
Contributing Area (acres): 9.04
Percent of Sub-Area (%): 27.8
Street Width (ft): 32
Curb Height (in): 6
Map Slope: 0.0100

Q for Flow Path (cfs): 27.84
Q Top (cfs): 3.76
Q Bottom (cfs): 31.60
Velocity Top (ft/s): 2.30
Velocity Bottom (ft/s): 3.92
Avg Velocity (ft/s): 3.11
Wave Velocity (ft/s): 4.66
DATA FOR FLOW PATH 3

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.1384
Flow Type: Pipe
Length (ft): 101.199
Top Elevation (ft): 125.92
Bottom Elevation (ft): 124.6
Contributing Area (acres): 0.54
Percent of Sub-Area (%): 1.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 27
Used Pipe Diameter (in): 27
Manning's N: 0.013
Map Slope: 0.0130
Q for Flow Path (cfs): 1.66
Q Top (cfs): 31.60
Q Bottom (cfs): 33.26
Avg Velocity (ft/s): 10.05
Wave Velocity (ft/s): 12.18
DATA FOR FLOW PATH 4

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.0699
Flow Type: Pipe
Length (ft): 61.97
Top Elevation (ft): 124.6
Bottom Elevation (ft): 123.79
Contributing Area (acres): 9.65
Percent of Sub-Area (%): 29.7
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0131
Q for Flow Path (cfs): 29.72
Q Top (cfs): 33.26
Q Bottom (cfs): 62.99
Avg Velocity (ft/s): 11.43
Wave Velocity (ft/s): 14.77
DATA FOR FLOW PATH 5

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 0.5292
Flow Type: Pipe
Length (ft): 411.199
Top Elevation (ft): 123.79
Bottom Elevation (ft): 119.66
Contributing Area (acres): 0.6

Percent of Sub-Area (%): 1.8
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 36
Used Pipe Diameter (in): 36
Manning's N: 0.013
Map Slope: 0.0100
Q for Flow Path (cfs): 1.85
Q Top (cfs): 62.99
Q Bottom (cfs): 64.83
Avg Velocity (ft/s): 10.78
Wave Velocity (ft/s): 12.95
DATA FOR FLOW PATH 6

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 1.2601
Flow Type: Pipe
Length (ft): 997.716
Top Elevation (ft): 119.66
Bottom Elevation (ft): 112.57
Contributing Area (acres): 11.43
Percent of Sub-Area (%): 35.2
Initial Pipe Diameter (in): 24
Calculated Pipe Diameter (in): 48
Used Pipe Diameter (in): 48
Manning's N: 0.013
Map Slope: 0.0071
Q for Flow Path (cfs): 35.20
Q Top (cfs): 64.83
Q Bottom (cfs): 100.04
Avg Velocity (ft/s): 10.32
Wave Velocity (ft/s): 13.20

Project: Community Memorial Hospital
Date: 6/25/2009 10:34:23 AM
Engineer: Karla V. Castillo
Consultant: Jensen Design & Survey, Inc

Sub-Area Name: Watershed D
Computing Tc for all rainfall frequencies for sub-area Watershed D...

Tc for frequency = 10.00: 5.896 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 5.896 min. = 6 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 0.42
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 10
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.400
C Total: 0.909
Sum Q Segments (cfs): 1.30
Q Total (cfs): 1.30
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 353.77
Time of Concentration (min): 5.896

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.8961
Flow Type: Overland
Length (ft): 176.884
Top Elevation (ft): 116.12
Bottom Elevation (ft): 114.74
Contributing Area (acres): 0.42
Percent of Sub-Area (%): 100.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0078
Effective Slope: 0.0078
Q for Flow Path (cfs): 1.30
Avg Velocity (ft/s): 0.50
Passed Scour Check: N/A

Tc for frequency = 25.00: 5.735 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 5.735 min. = 6 min.

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 0.42
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 25
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 3.800
C Total: 0.913
Sum Q Segments (cfs): 1.46
Q Total (cfs): 1.46
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 344.12
Time of Concentration (min): 5.735

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 5.7354
Flow Type: Overland
Length (ft): 176.884
Top Elevation (ft): 116.12
Bottom Elevation (ft): 114.74
Contributing Area (acres): 0.42
Percent of Sub-Area (%): 100.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0078
Effective Slope: 0.0078
Q for Flow Path (cfs): 1.46
Avg Velocity (ft/s): 0.51
Passed Scour Check: N/A

Tc for frequency = 50.00: 2.948 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 2.948 min. = 3 min. ** TC ERROR **

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 0.42
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 50
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

Intensity (in/hr): 5.900
C Total: 0.921
Sum Q Segments (cfs): 2.28
Q Total (cfs): 2.28
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 176.88
Time of Concentration (min): 2.948

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.9481
Flow Type: Overland
Length (ft): 176.884
Top Elevation (ft): 116.12
Bottom Elevation (ft): 114.74
Contributing Area (acres): 0.42
Percent of Sub-Area (%): 100.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0078
Effective Slope: 0.0078
Q for Flow Path (cfs): 2.28
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A

Tc for frequency = 100.00: 2.948 Minutes
DATA FOR SUB AREA 3

SUB AREA TIME OF CONCENTRATION: 2.948 min. = 3 min. ** TC ERROR **

SUB AREA INPUT DATA

Sub Area Name: Watershed D
Total Area (ac): 0.42
Flood Zone: 2
Rainfall Zone: K
Storm Frequency (years): 100
Development Type: Commercial
Soil Type: 4.00
Percent Impervious: 80
SUB AREA OUTPUT

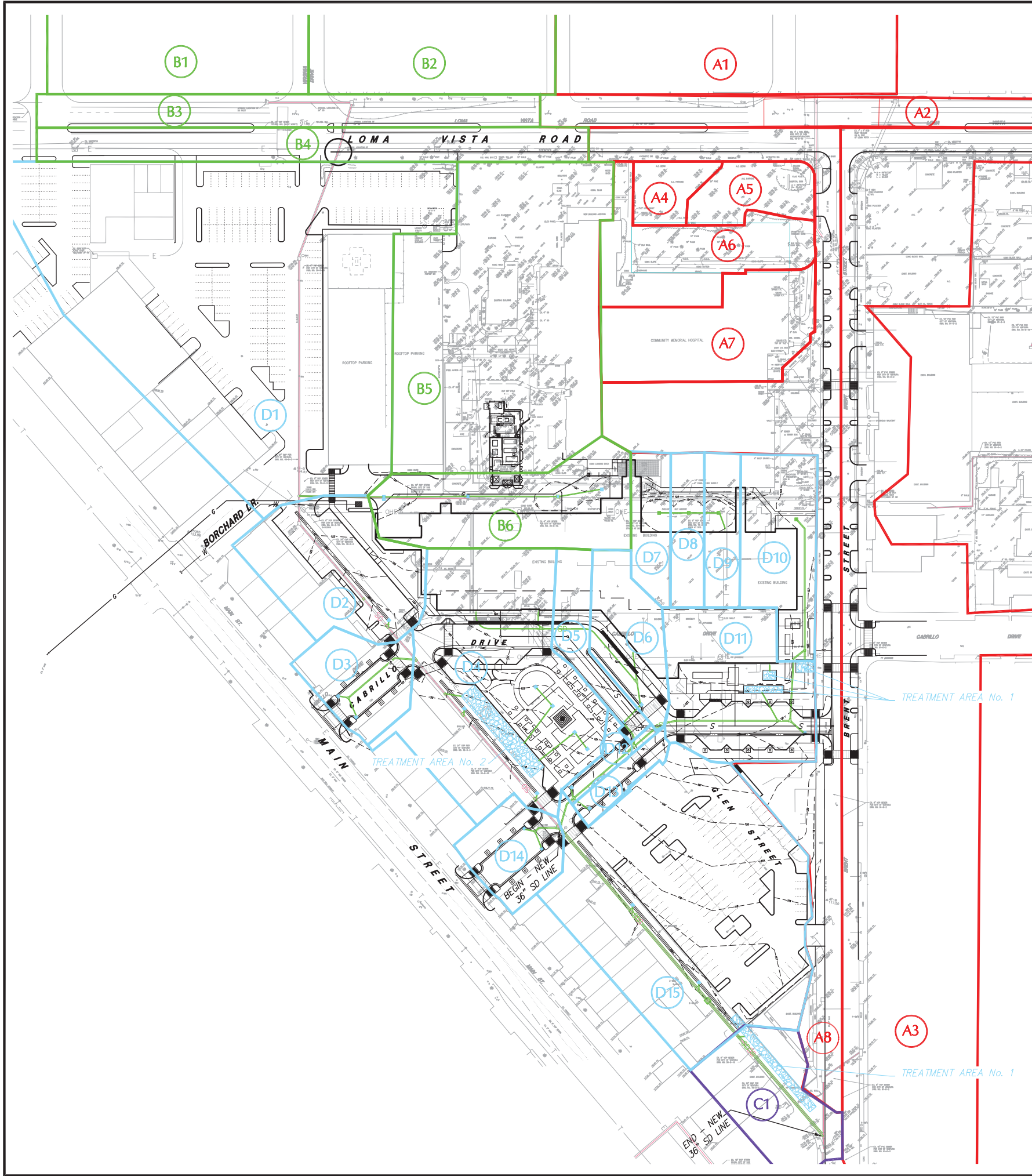
Intensity (in/hr): 5.440
C Total: 0.920
Sum Q Segments (cfs): 2.10
Q Total (cfs): 2.10
Sum Percent Area (%): 100.0
Sum of Flow Path Travel Times (sec): 176.88
Time of Concentration (min): 2.948

DATA FOR FLOW PATH 1

Flow Path Name: FlowPath
FLOW PATH TRAVEL TIME (min): 2.9481
Flow Type: Overland
Length (ft): 176.884
Top Elevation (ft): 116.12
Bottom Elevation (ft): 114.74
Contributing Area (acres): 0.42
Percent of Sub-Area (%): 100.0
Overland Type: Valley
Development Type: Commercial
Map Slope: 0.0078
Effective Slope: 0.0078
Q for Flow Path (cfs): 2.10
Avg Velocity (ft/s): 1.00
Passed Scour Check: N/A

APPENDIX D

Treatment Facilities Exhibit and Sizing



DEVELOPED CONDITIONS

PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A	20.75	36.44	52.48	63.90
B	23.61	41.46	59.71	72.71
C	0.42	0.74	1.06	1.29
D	9.83	17.26	24.86	30.27
total	54.61	95.90	138.11	168.19

Watershed A PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
A1	12.76	22.41	32.27	39.30
A2	0.52	0.91	1.32	1.60
A3	4.26	7.48	10.77	13.12
A4	0.14	0.25	0.35	0.43
A5	0.21	0.37	0.53	0.65
A6	0.52	0.91	1.32	1.60
A7	0.58	1.02	1.47	1.79
A8	1.76	3.09	4.45	5.42
Total	20.75	36.44	52.48	63.90

Watershed B PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
B1	10.26	18.02	25.95	31.60
B2	9.65	16.95	24.40	29.72
B3	0.53	0.93	1.34	1.63
B4	0.60	1.05	1.52	1.85
B5	1.90	3.34	4.81	5.85
B6	0.67	1.18	1.69	2.06
Total	23.61	41.46	59.71	72.71


Watershed C PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
C1	0.42	0.74	1.06	1.29
Total	0.42	0.73752	1.06218	1.293498

Watershed D PEAK RUNOFF				
Watershed Name	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
D1	3.34	5.87	8.45	10.29
D2	0.61	1.07	1.54	1.88
D3	0.28	0.49	0.71	0.86
D4	1.29	2.27	3.26	3.97
D5	0.20	0.35	0.51	0.62
D6	0.30	0.53	0.76	0.92
D7	0.18	0.32	0.46	0.55
D8	0.16	0.28	0.40	0.49
D9	0.18	0.32	0.46	0.55
D10	0.43	0.76	1.09	1.32
D11	0.65	1.14	1.64	2.00
D12	0.08	0.14	0.20	0.25
D13	0.09	0.16	0.23	0.28
D14	0.24	0.42	0.61	0.74
D15	1.80	3.16	4.55	5.54
Total	9.83	17.26	24.86	30.27

LEGEND

- WATERSHED NAME
- WATERSHED AREA (ac)
- Q50 (cfs)
- WATERSHED BOUNDARY
- EXISTING STORMDRAIN LINE
- PROPOSED STORMDRAIN LINE
- PRELIMINARY INFILTRATION TRENCH LOCATIONS

DEVELOPED CONDITIONS



1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979

SCALE: 1"=xx'

DATE: APRIL 17, 2009

J.N.: CMH1 4209

DWG. NAME: 4209 Developed Hydro Treatment

HYDROLOGY EXHIBIT
FOR
Community Memorial Hospital

147 N. Brent Street
City of Ventura

STATE OF CALIFORNIA

Infiltration Trench

Description

An Infiltration Trench (INT) consists of subsurface gravel and sand bed constructed in naturally pervious soils (Type A or B soils) where runoff is stored until it infiltrates into the soil profile. Upstream control measures such as Turf Buffers (see G-5.1), Grass-lined Channels (see G-5.2), Grass Strip Filters (see T-1), or Grass Swales Filters (see T-2), are typically combined with INTs to provide sediment removal upstream of the INT. The trench is designed to retain and infiltrate the SQDV over a specified period of time (40 hours). A screened overflow pipe or outlet should be provided to convey runoff in excess of the SQDV to downstream drainage. An observation well constructed of perforated PVC pipe should be provided to allow the depth of water in the trench to be monitored. Typical elements of an INT system are shown in Figure 5-15. Infiltration vaults and leach fields are variations of the infiltration trench concept in which runoff is distributed to upper zone of the subsurface gravel bed by means of perforated pipes. Illustrations of infiltration vaults and leach fields are shown in Figure 5-16 and 5-17, respectively.

General Application

Infiltration trenches are typically used to serve areas less than 10 acres and are usually combined with upstream treatment control measures to reduce sediment load to the INT. For example, INTs are commonly used in combination with Turf Buffers to treat runoff from parking lots or other paved areas as illustrated in Figure 5-15. Infiltration trenches are easily incorporated into the landscape features of development sites.

Advantages/Disadvantages***General***

In addition to removing pollutants effectively, infiltration trenches, like infiltration basins, also control runoff volume, which may serve to reduce downstream bank erosion in watercourses.

The primary disadvantage of an infiltration trench, as for any infiltration device, is the potential for clogging if excessive sediment is allowed to flow into the facility. The cost of restorative maintenance can be high if soil infiltration rates are significantly reduced due sediment deposition.

Also, there is a risk of groundwater contamination in very coarse soils since coarse soils do not effectively remove dissolved pollutants. This may require groundwater monitoring. INTs cannot be put into operation until the upstream tributary area is stabilized.

Site Suitability

INBs cannot be placed on fill or unstable sites. Also, INBs should not be placed in high-risk areas such as service/gas stations, truck stops, and heavy industrial sites due to the groundwater contamination risk.

Before exploring the use of infiltration treatment control measures preliminary soil investigations, including a percolation test, shall be performed to assess whether the soils on site have an extended infiltration rate of at least 0.5 inches per hour. Separate on-site infiltration systems from the groundwater table (or bedrock) by a minimum of 5 feet vertically to provide sufficient infiltration volume within the soil. Tributary area should have a low potential for erosion. Other suitability considerations include the soil makeup (Appendix E), site topography, and the location of other facilities.

Infiltration facilities shall be sited at least 50 feet away from slopes steeper than 15 percent. Adequate spacing (100 feet or more) shall be provided between infiltration facilities and non-potable wells, tanks, drain fields and springs. For separation between infiltration BMPs and potable water supply wells, follow Department of Health Services requirements in the Guidelines for Location of Water Wells. INTs shall also be sited at least 20 feet down slope or 100 feet up slope from building foundations. A geotechnical expert shall be consulted when necessary to verify appropriate placement on site.

An important consideration for all infiltration facility configurations is that, during construction, great care must be taken not to reduce the infiltration capacity of the soil in the facility through compaction or by using the infiltration area as a sediment trap. Infiltration facilities shall be constructed late in the site development after soils (that might erode and clog the units) have been stabilized, or shall be protected until the site is stabilized.

Pollutant Removal

The amount of pollutant removed by INTs should be significant and should equal or exceed the removal rates provided by sand filters. In addition to settling, infiltration basins provide filtering, adsorption, and biological uptake of constituents in stormwater. Relative pollutant removal effectiveness is indicated in Table 5-1.

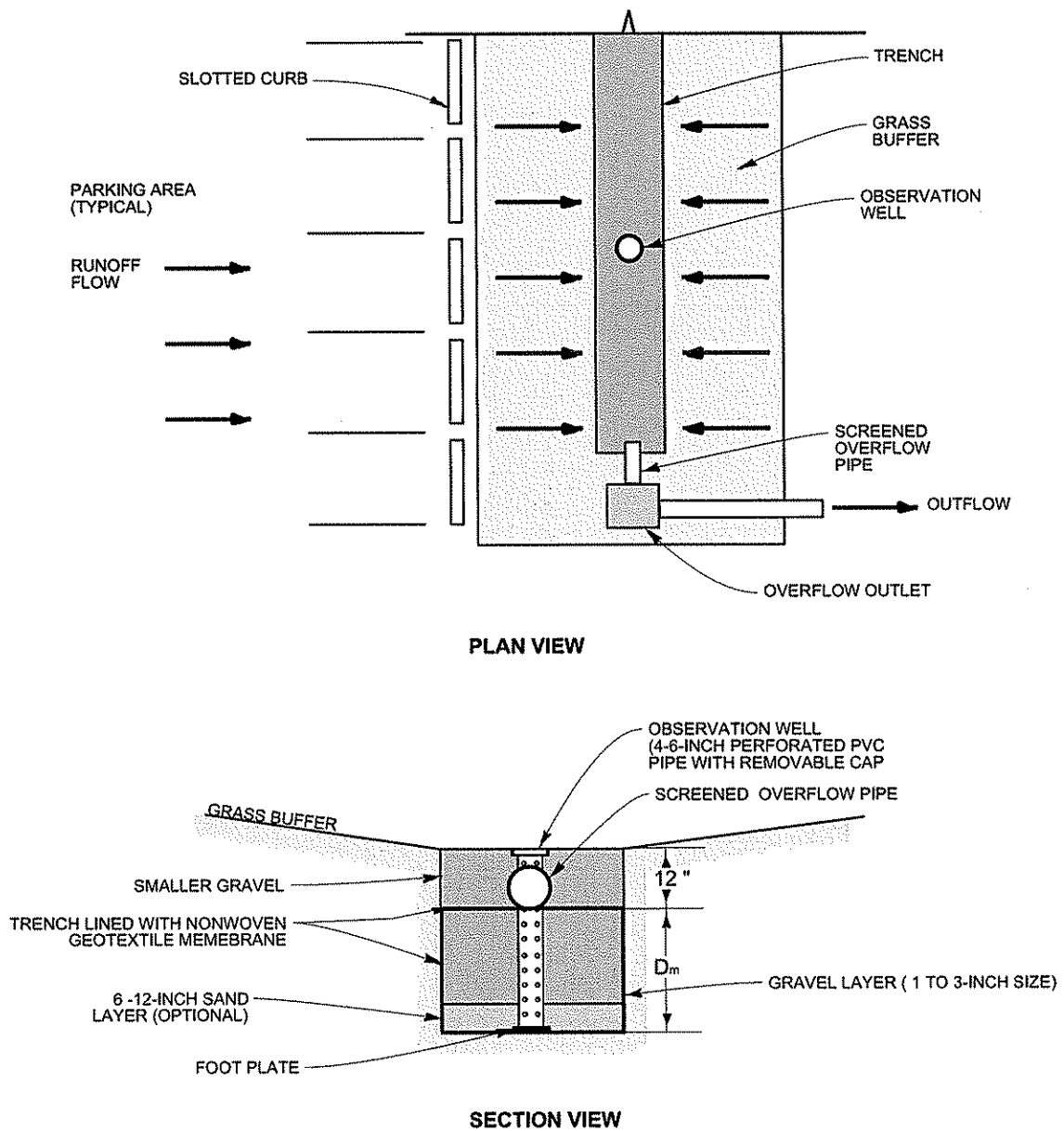


Figure 5-15. INFILTRATION TRENCH

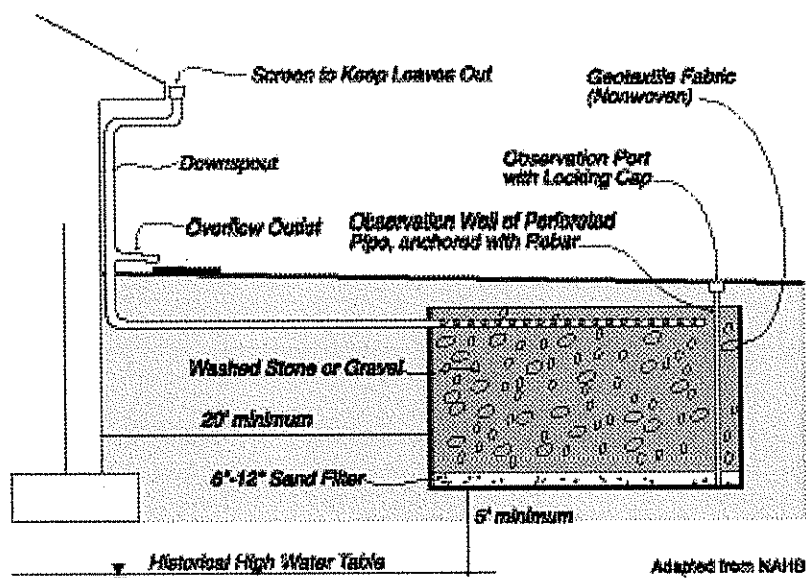


FIGURE 5-16. INFILTRATION VAULT

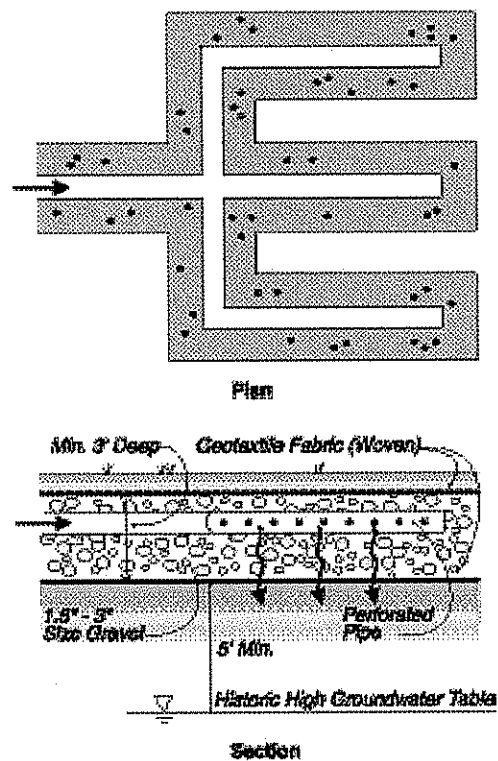


FIGURE 5-17. LEACH FIELD

Design Criteria and Procedure

Principal design criteria for INTs are listed in Table 5-13. These criteria also apply to vaults and leach fields

Table 5-13. Infiltration Trench Design Criteria

Design Parameter	Unit	Design Criteria
Drawdown time for SQDV	hrs	40
SQDV	acre-ft	80% annual capture. Use Figure 5-1 @ 40-h drawdown
Trench bottom elevation	ft	5 feet above seasonally high groundwater table minimum.
Trench surcharge depth (D_m)	ft	$D_m = \leq 8.0$ ft
Gravel bed material	ft	Clean, washed aggregate 1 to 3 inches in diameter
Trench lining material	—	Geotextile fabric (see Table 5-7)
Setbacks	ft ft.	100 feet from wells, tanks, fields, springs 20 feet down slope or 100 feet up slope from foundations Do not locate under tree drip-lines

Design procedure and application of design criteria are outlined in the following steps:

1. **Trench Storage Volume** Provide a storage volume equal to 100 percent of the SQDV, based on a 40-hr drawdown time.
 - a. Determine the percent imperviousness of the tributary area (I_a).
 - b. Determine effective imperviousness (I_{wq}) by adjusting for site design source controls using Figure 3-4, as appropriate.
 - c. Determine required unit basin storage volume (V_u) using Figure 5-1 with 40-hr drawdown and I_{wq} value from step 1.b.
 - d. Calculate the SQDV in acre-ft as follows:

$$SQDV = (V_u / 12) \times \text{Area}$$

where

Area = Watershed area tributary to INB

2. **Trench Water Depth** Calculate the maximum allowable depth of water surcharge in the trench. Maximum depth should not exceed 8 feet.:

$$D_m = tI/12s$$

where I = site infiltration rate in (in/hr)

s = safety factor

t = minimum drawdown time = 40 hours

In the formula for maximum allowable depth, the safety factor accounts for the possibility of inaccuracy in the infiltration rate measurement. The less certain the infiltration rate the higher the safety factor shall be. Minimum safety factors shall be as follows:

- Without site-specific borings and percolation tests, use $s=10$
- With borings (but no percolation test), use $s=6$
- With percolation test (but no borings), use $s=5$
- With borings and percolation test, use $s=3$

3. Trench Surface Area Calculate the minimum surface area of the trench bottom:

$$A_m = V/D_m$$

where:

A_m = minimum area required (ft²)

V = SQDV (ft³)

D_m = maximum allowable depth (ft)

4. Observation Well Provide a vertical section of perforated PVC pipe, 4 to 6 inches in diameter, installed flush with top of trench on a foot plate and with a locking, removable cap.
5. Bypass Provide for bypass or overflow of runoff volumes in excess of the SQDV by means of a screened overflow pipe connected to downstream storm drainage or grated overflow outlet.

Design Example

Design forms to document the design procedure are provided in Appendix G. A completed design form follows as a design example.

Design Procedure Form for T-10: Infiltration Trench

Designer: _____

Company: _____

Date: _____

Project: _____

Location: _____

1. Determine Basin Storage Volume

a. Percent Imperviousness of Tributary Area

$I_a =$ 70 %

b. Effective Imperviousness (Determine using Figure 3-4)

$I_{wq} =$ 66 %

c. Required Unit Basin Storage Volume (V_u)
Use Figure 5-1 with 40 hr drawdown and I_{wq}

$V_u =$ 0.68 in.

d. Watershed Area Tributary to DBSF

Area = 0.5 acres

e. Calculate SQDV
 $SQDV = (V_u / 12) \times \text{Area}$

SQDV = 0.028 acre-ft

2. Maximum Allowable Depth ($D_m = tl/12s$)

a. Site infiltration rate (I)

$I =$ 3.0 in/hr

b. minimum drawdown time ($t = 40$ hours)

$t =$ 40 hrs

c. safety factor (s)

$s =$ 3

d. $D_m = tl/12s$

$D_m =$ 3.33 ft.

3. Trench Bottom Surface Area

$$A_s = SQDV / D_m$$

$A_s =$ 366 ft²

Notes:

Maintenance Requirements

The following maintenance requirements apply to Infiltration Trenches.

Maintenance Agreement

On-site treatment control measures are maintained by the owner/operator. Maintenance agreements between the owner/operator and the governing agency may be required. However, if pretreatment is recommended but not included in the design, a maintenance agreement will be required. If required, a maintenance agreement must be executed by the owner/operator before the improvement plans are approved. See Appendix C for example maintenance and access agreement.

Maintenance Plan

A post-construction Maintenance Plan shall be prepared and made available at the governing agency's request. The Maintenance Plan should address items such as:

- Operation plan and schedule, including a site map
- Maintenance and cleaning activities and schedule
- Equipment and resource requirements necessary to operate and maintain facility
- Responsible party for operation and maintenance

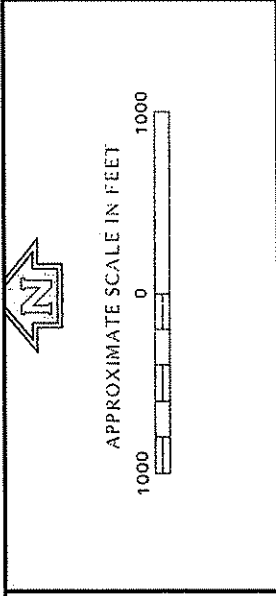
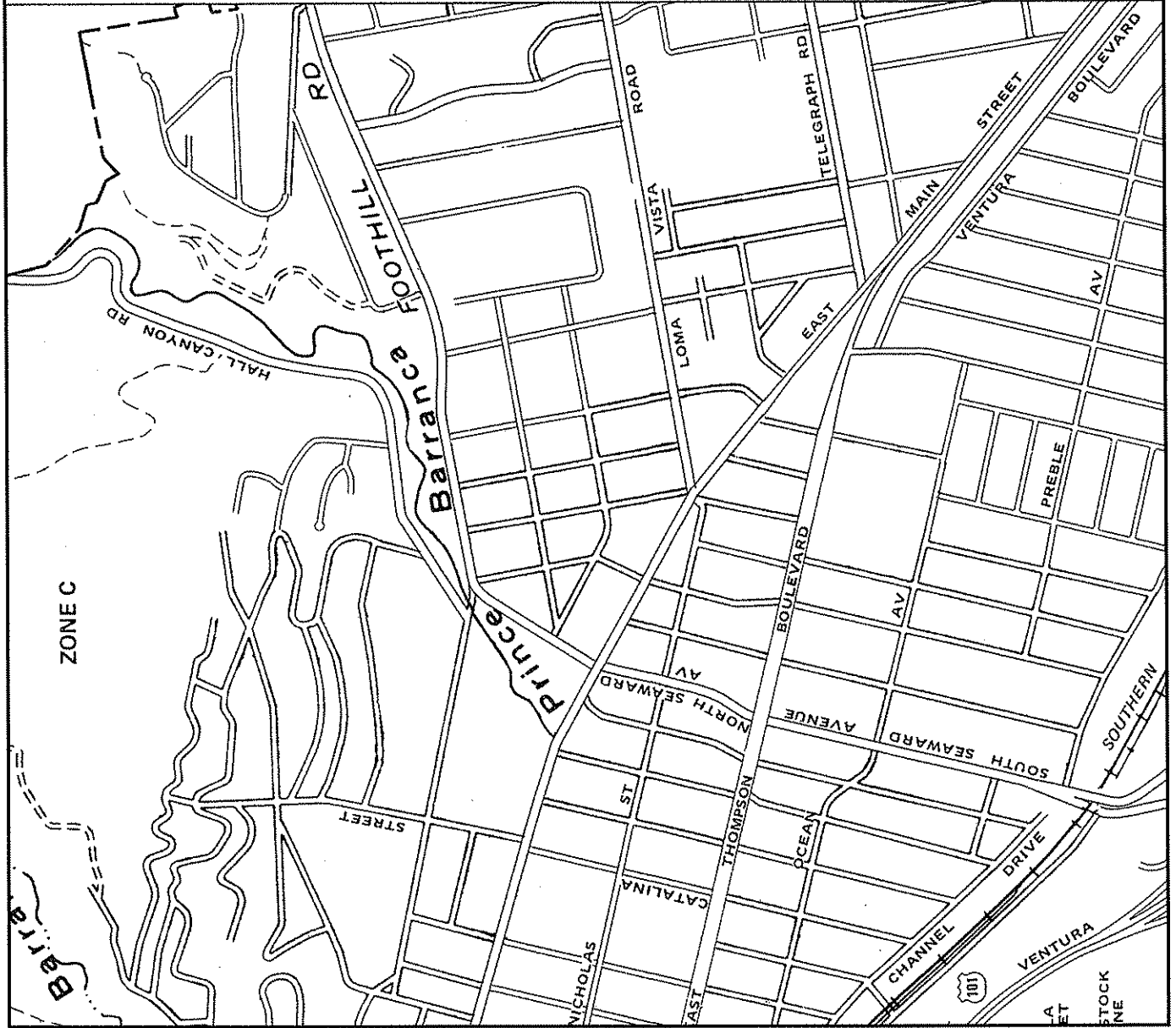
See Appendix D for additional Maintenance Plan requirements and suggested template.

Maintenance Activities

- Inspect a minimum of twice a year, before and after the rainy season, after large storms, or more frequently if needed.
- Clean when loss of infiltrative capacity is observed. If drawdown time is observed to have increased significantly over the design drawdown time, removal of sediment may be necessary. This is an expensive maintenance activity and the need for it can be minimized through prevention of upstream erosion.
- Mow, as appropriate for vegetative cover species.
- Monitor health of vegetation and replace as necessary.
- Control mosquitoes as necessary.
- Remove litter and debris from INT area as required.

APPENDIX E

Flood Insurance Rate Map



NATIONAL FLOOD INSURANCE PROGRAM


FIRM
FLOOD INSURANCE RATE MAP

CITY OF
SAN BUENAVENTURA,
CALIFORNIA
VENTURA COUNTY

PANEL 5 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
060419 0005 B

EFFECTIVE DATE:
SEPTEMBER 29, 1986


Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



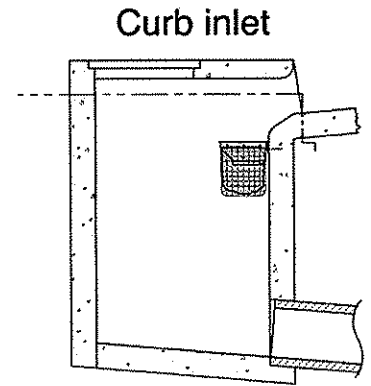
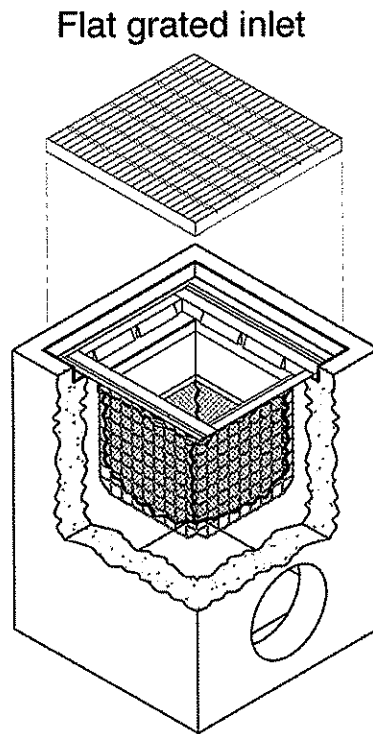
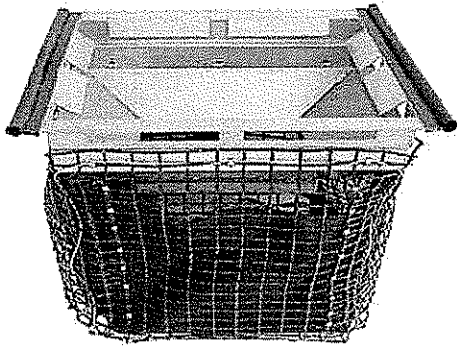
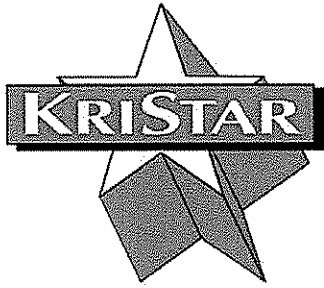
Parcel boundaries on this exhibit are a graphical representation only. They should not be used in place of record boundary information and/or field survey data and do not accurately define property boundaries.

JURISDICTION STREAM

1 inch = 400 feet

APPENDIX F

Kristar Flogard Plus Catch Basin Inserts



FloGard+PLUS® / Product Specifications

The FloGard+PLUS® is a multipurpose catch basin insert designed to capture sediment, debris, trash & oils/grease from low (first flush) flows.

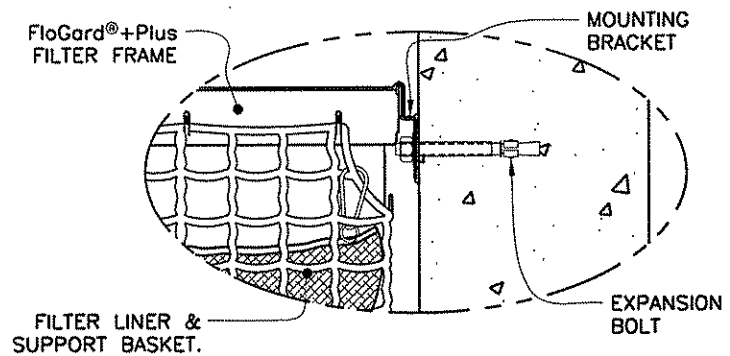
A (dual) high-flow bypass allows flows to bypass the device while retaining sediment and larger floatables (debris & trash) AND allows sustained maximum design flows under extreme weather conditions.

FloGard+PLUS® inserts are available in sizes to fit most industry-standard drainage inlets (...flat grated, combination, curb and round inlets).

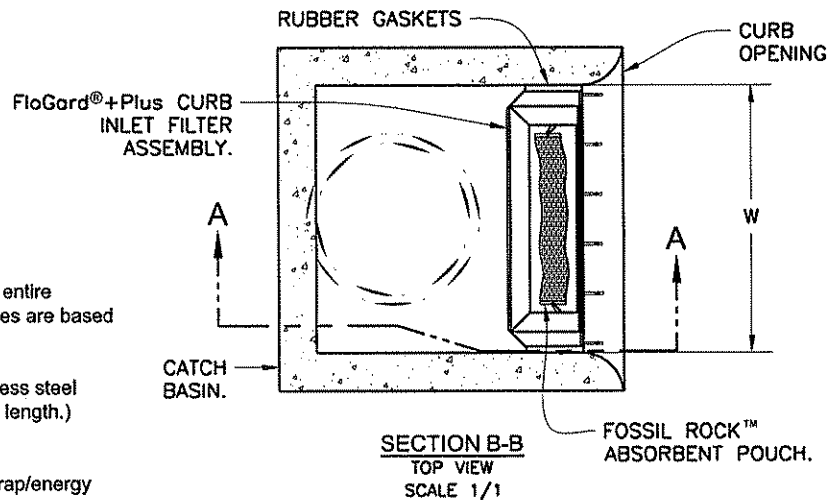
FloGard+PLUS® catch basin inserts are recommended for areas subject to silt and debris as well as low-to-moderate levels of petroleum hydrocarbon (oils and grease). Examples of such areas are vehicle parking lots, aircraft ramps, truck and bus storage yards, corporation yards, subdivision streets and public streets.

SPECIFIER CHART

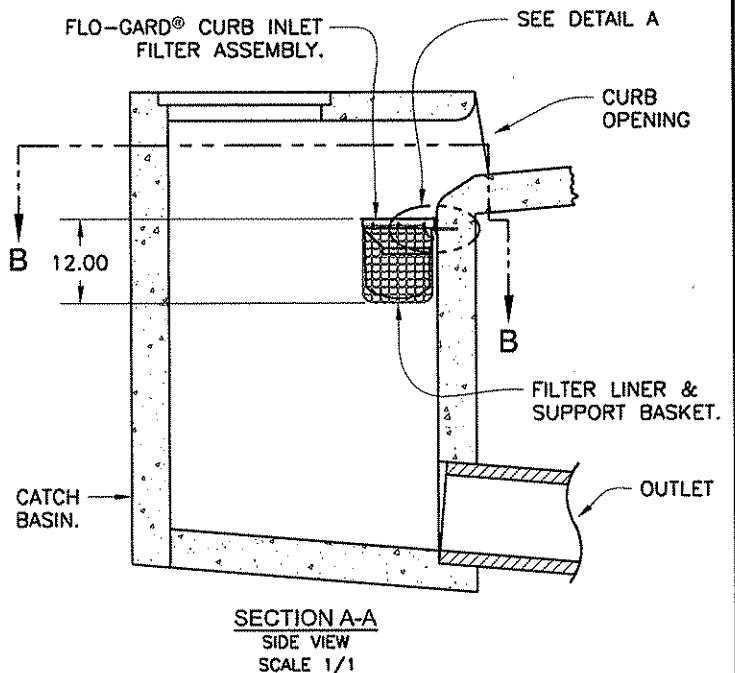
MODEL NO.	Curb Opening Width - W -	Storage Capacity - Cu. Ft. -	Clean Flow Rate - GPM/CFS -
FGP-24CI	2.0' (24")	.95	338 / 1.75
FGP-30CI	2.5' (30")	1.20	450 / 1.00
FGP-36CI	3.0' (36")	1.50	563 / 1.25
FGP-42CI	3.5' (42")	1.80	675 / 1.50
FGP-48CI	4.0' (48")	2.10	768 / 1.76
FGP-5.0CI	5.0' (60")	2.40	900 / 2.00
FGP-6.0CI	6.0' (72")	3.05	1,126 / 2.51
FGP-7.0CI	7.0' (84")	3.65	1,350 / 3.01
FGP-8.0CI	8.0' (96")	4.25	1,576 / 3.51
FGP-10.0CI	10.0' (120")	4.85	1,800 / 4.01
FGP-12.0CI	12.0' (144")	6.10	2,252 / 5.02
FGP-14.0CI	14.0' (168")	7.30	2,700 / 6.02
FGP-16.0CI	16.0' (192")	8.55	3,152 / 7.02
FGP-18.0CI	18.0' (216")	9.45	3,490 / 7.78
FGP-21.0CI	21.0' (252")	10.95	4,050 / 9.02
FGP-28.0CI	28.0' (336")	14.60	5,400 / 12.03



DETAIL A
MOUNTING BRACKET & EXPANSION BOLTS
SEE NOTE 2
SCALE 6/1



SECTION B-B
TOP VIEW
SCALE 1/1



SECTION A-A
SIDE VIEW
SCALE 1/1

NOTES:

1. FloGard®+PLUS filter inserts shall be installed across the entire width of curb opening. Storage capacity and clean flow rates are based on full width installation.
2. Filter insert shall be attached to the catch basin with stainless steel expansion anchor bolts & washers (3/8" x 2-1/2" minimum length.) See detail A.
3. FloGard®+PLUS filter inserts are designed with a debris trap/energy dissipator for the retention of floatables and collected sediments.
4. Filter support frame shall be constructed from stainless steel Type 304.
5. Filter liner shall be constructed from durable polypropylene, woven, monofilament, geotextile. Filter liner shall not allow the retention of water between storm events.
6. Filter inserts are supplied with "clip-in" filter pouches utilizing FOSSIL ROCK™ filter medium for the collection and retention of petroleum hydrocarbons (oils & greases).
7. FloGard®+PLUS filter inserts and FOSSIL ROCK™ filter medium pouches must be maintained in accordance with manufacturer recommendations.
8. FloGard +PLUS filter inserts are available in standard lengths of 24", 30", 35", 42" & 48" and may be installed in various length combinations (end to end) to fit length of noted catch basin.
9. Clean flow rates are "calculated" based on liner flow rate of 140 gallons per minute per square foot of material, a factor of .50 has been applied to allow for anticipated sediment & debris loading. An additional safety factor of between .25 & .50 may be applied to allow for site specific sediment loading.
10. Storage capacity reflects maximum solids collection prior to impending "initial" filtering bypass. The "ultimate" high-flow bypass will not become impeded due to maximum solids loading.

TITLE

FloGard®+PLUS
CATCH BASIN FILTER INSERT
(Curb Inlet Style)



KriStar Enterprises, Inc.

P.O. Box 6419, Santa Rosa, CA 95406 89
Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

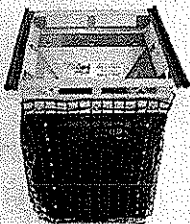
DRAWING NO.	REV	ECO	DATE	SHEET
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SHEET 1 OF 1

Performance Summary

Tech Bulletin
KS-FGPWWC-082205-C

**Kristar
FloGard
+PLUS®
Catch Basin
Insert Filter**



See product
specifications for
standard model
details



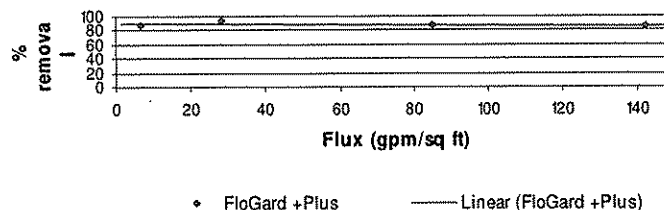
Kristar Enterprises
1219 Briggs Avenue
Santa Rosa, CA
95401

(800) 579-8819

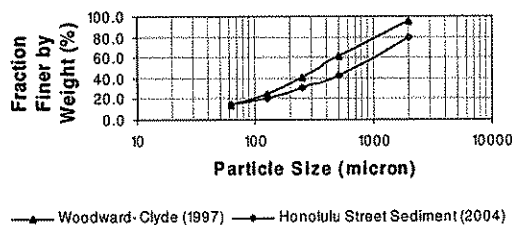
www.kristar.com

Independent field tests conducted in Hawaii and New Zealand on FloGard +PLUS® Catch Basin Insert Filters to determine TSS removal efficiency. Results were extrapolated to a typical street deposited sediment particle size. Removal efficiencies were plotted and reflect effective TSS removal over the typical range of operating flow rates. Results are shown below as a function of unit internal surface area.

**FloGard +Plus®
TSS Removal
Typical Urban Runoff Distribution***
*extrapolated from available field test data



**Street Deposited Sediment
Typical Particle Size Distribution
from urban runoff TSS survey data**



Units are sized to fit most common styles of drainage inlet grate frames or inlet widths. Rated filtered flow capacities for each model typically exceed the required "first flush" treatment flow rate, and account for reduction in capacity as the unit accumulates suspended pollutants. Rated bypass capacity for each model also typically exceeds the inlet capacity of the catch basin.

Kristar's FloGard +PLUS® Catch Basin Insert Filter is an efficient inlet prefilter designed to remove suspended sediment and floatable trash and hydrocarbons from stormwater runoff in new or retrofit applications. It is ideally suited for removal of primary pollutants from paved surfaces in commercial and residential areas, or may form part of a treatment train. The device features a unique dual-bypass design, durable components, flexible installation options and easy maintenance access.

FloGard +PLUS® Test Results Summary

Testing Agency	% TSS Removal	% Oil & Grease Removal
UCLA	80*	70-80
U of Auckland Tonkin & Taylor Ltd (for City of Auckland)	95** 78-86***	
U of Hawaii (for City of Honolulu)	80***	

*Sand larger than ~575 µm

**Sand distribution ~100-1000 µm

***Local street sweep material (distribution consistent with NURP)



GENERAL SPECIFICATIONS FOR MAINTENANCE OF FLO-GARD+PLUS® CATCH BASIN INSERT FILTERS

SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed Flo-Gard+Plus® Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

RECOMMENDED TIMING OF SERVICE:

DPS guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (washracks, parking garages, etc.): On a recurring basis (no less than three times per years).

SERVICE PROCEDURES:

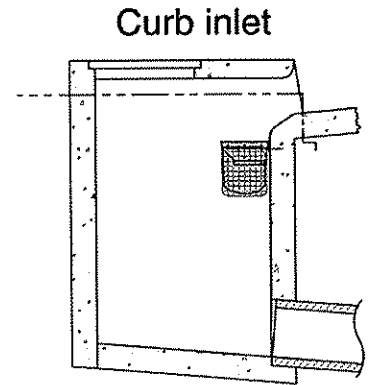
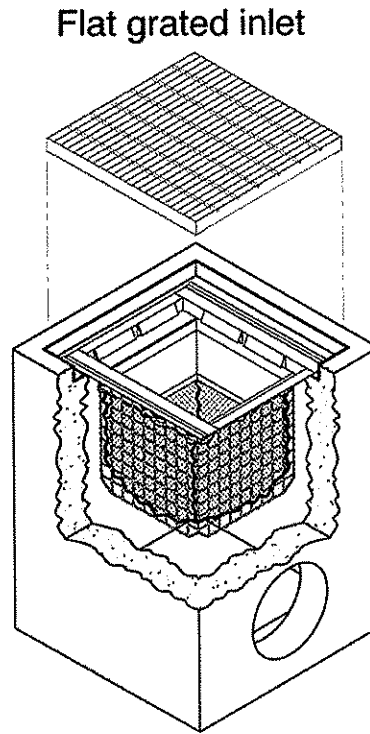
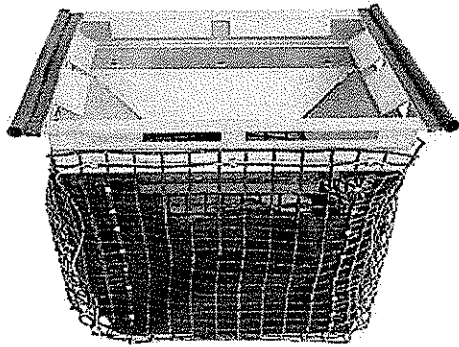
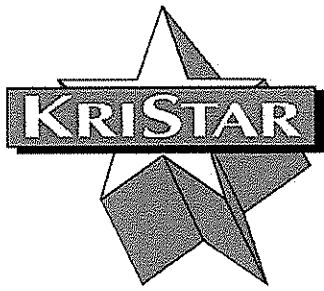
1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing Flo-Gard+Plus® catch basin inserts.)
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc. shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary and the pouch tethers re-attached to the liner's D-ring. See below.
5. The grate shall be replaced.

REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium pouch exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium pouches will be replaced with new pouches. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

Note: As the generator, the landowner is ultimately responsible for the proper disposal of the exposed filter medium and debris. Because the filter media likely contain petroleum hydrocarbons, heavy metals and other harmful pollutants, the materials must be treated as an EPA Class 2 Hazardous Waste and properly disposed of. DPS relieves the landowner of the actual disposal task, and provides certification of its completion in accordance with appropriate regulations.

DPS also has the capability of servicing all manner of catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined space trained and certified. Call us at (888) 950-8826 for further information and assistance.



FloGard+PLUS™ / Installation Guide

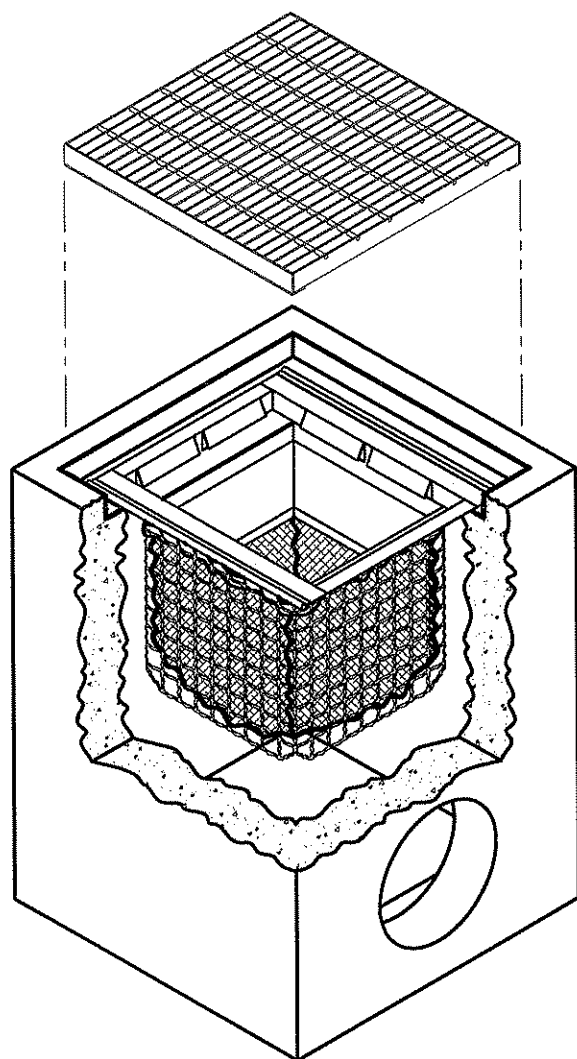
FloGard+PLUS™ Catch Basin Insert Filters are designed for installation in flat grated catch basins, combination (grated and curb opening) catch basins and curb opening catch basins.

They may be “Frame” mounted or “Wall” mounted depending on the type of catch basin.

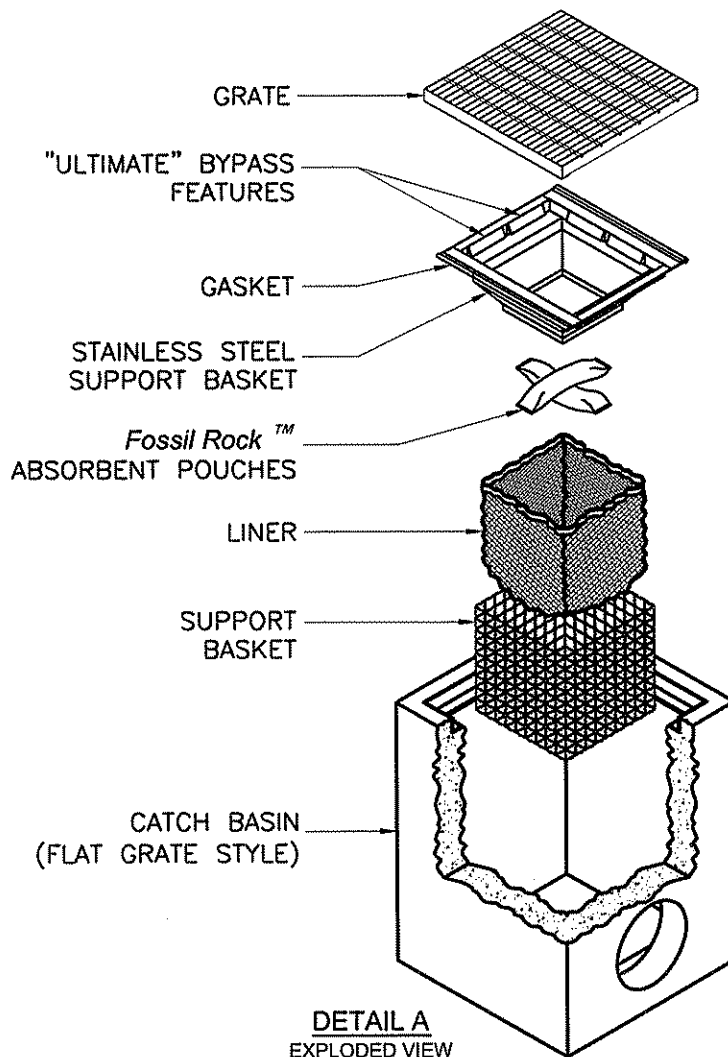
Key elements of installation of the various devices and mounting methods are:

Frame Mount Insert Filter (for standard or irregular-dimensioned flat grated inlets):

- Remove the inlet grate and clean and remove any collected debris and trash from the catch basin.
- Clean off the grate bearing ledge and lower the filter assembly onto the ledge.
- Insure that the two floatable adsorbent pouches are tethered to the D-rings in the bottom corners of the assembly.
- Replace the inlet grate.



FLOGARD+PLUS® FILTER
-INSTALLED INTO CATCH BASIN-



NOTES:

1. FloGard®+Plus (frame mount) high capacity catch basin inserts are available in most sizes and styles (see specifier chart, sheet 2 of 2). Refer to the FloGard®+Plus (wall mount) insert for devices to fit non-standard, or combination style catch basins.
2. Filter insert shall have both an "initial" filtering bypass and "ultimate" high flow bypass feature.
3. Filter support frame shall be constructed from stainless steel Type 304.
4. Allow a minimum of 2.0 feet, of clearance between the bottom of the grate and top of outlet pipe(s), or refer to the FloGard® insert for "shallow" installations.
5. Filter medium shall be *Fossil Rock™*, installed and maintained in accordance with manufacturer specifications.
6. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.
7. Filtered flow rate includes a safety factor of two.

U.S. PATENT # 6,00,023 & 6,877,029

TITLE

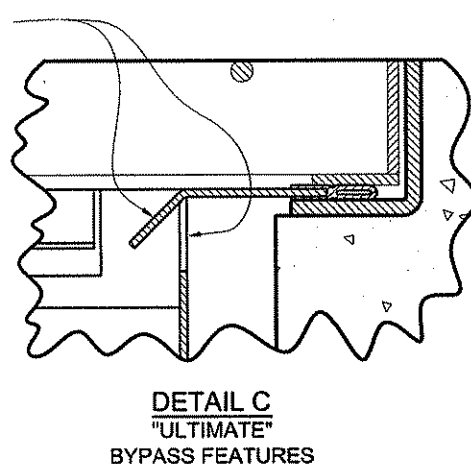
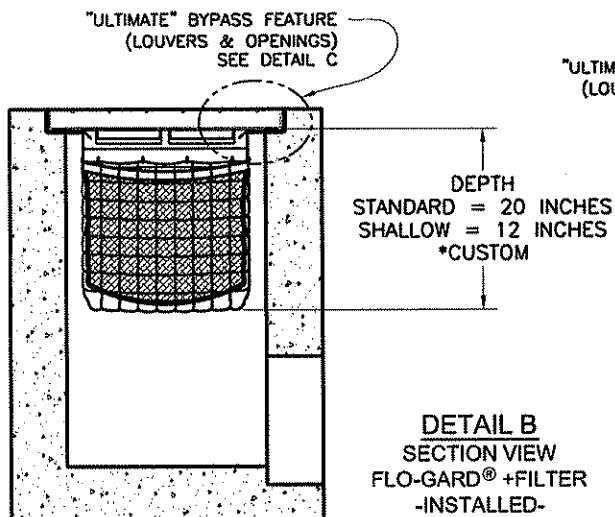
FloGard®+PLUS
CATCH BASIN FILTER INSERT
(Frame Mount)
FLAT GRATED INLET



KriStar Enterprises, Inc.

P.O. Box 6419, Santa Rosa, CA 95406 g4
Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

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* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART								
MODEL NO. STANDARD DEPTH	STANDARD & SHALLOW DEPTH <small>(Data in these columns is the same for both STANDARD & SHALLOW versions)</small>			STANDARD DEPTH -20 Inches-		MODEL NO. SHALLOW DEPTH	SHALLOW DEPTH -12 Inches-	
	INLET ID Inside Dimension (inch x inch)	GRATE OD Outside Dimension (inch x inch)	TOTAL BYPASS CAPACITY (cu. ft.)	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)		SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-1530F	15 X 30	15 X 35	6.9	2.3	1.6	FGP-1530F8	1.3	.9
FGP-16F	16 X 16	16 X 19	4.7	0.8	0.7	FGP-16F8	.45	.4
FGP-1624F	16 X 24	16 X 26	5.0	1.5	1.2	FGP-1624F8	.85	.7
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1820F	16 X 19	18 X 21	5.9	2.1	1.4	FGP-1820F8	1.2	.8
FGP-1824F	16 X 22	18 X 24	5.0	1.5	1.2	FGP-1824F8	.85	.7
FGP-1836F	18 X 36	18 X 40	6.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-21F8	1.25	.85
FGP-2142F	21 X 40	24 X 40	9.1	4.3	2.4	FGP-2142F8	2.45	1.35
FGP-2148F	19 X 46	22 X 48	9.8	4.7	2.6	FGP-2148F8	2.7	1.5
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	6.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-2440F	24 X 36	28 X 40	8.3	4.2	2.3	FGP-2440F8	2.4	1.3
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-SD24F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-SD24F8	1.25	.85
FGP-1836FGO	18 X 36	20 X 40	6.9	2.3	1.6	FGP-1836F8GO	1.3	.9
FGP-2436FGO	20 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8GO	1.95	1.15
FGP-48FGO	18 X 48	20 X 54	6.3	2.2	1.5	FGP-48F8GO	1.25	.85

TITLE

FloGard® +PLUS
CATCH BASIN FILTER INSERT
(Frame Mount)
FLAT GRATED INLET



KriStar Enterprises, Inc.

P.O. Box 6419, Santa Rosa, CA 95406 95
Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

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RAYMOND CHAN
EXECUTIVE OFFICER

January 18, 2007

Craig Beatty
Kristar Enterprises, Inc.
1219 Briggs Av.
Santa Rosa, CA 95401

RESEARCH REPORT: RR 5634
EFFECTIVE DATE: 01/01/07
EXPIRATION DATE: 01/01/08
Telephone: 800-579-8819

GENERAL APPROVAL - "FloGard" Series Curb Inlet Insert Filters manufactured by Kristar Enterprises, Inc. See attachment for list of approved model number.

DETAILS

FloGard Plus is a curb inlet insert designed to treat rainwater runoff. These filters include a stainless steel frame, and geotextile fabric liner encapsulating an adsorbent which may be replaced. They are designed to collect particulate, debris, metals and petroleum hydrocarbons from stormwater runoff with a built-in flow bypass.

The approval is subject to the following conditions:

1. This product may be installed in a storm water treatment system outside of a building (commercial or a residential) structure.
2. The storm water treatment system shall be sized in accordance with the manufacturer's recommendations, Table -1 shown of Page 3, and Chapter 11 and Appendix D, of Los Angeles Plumbing Code (LAPC), 2002 Edition.
3. Storm water drainage piping plans shall be submitted to Mechanical Plan Check and permit shall be obtained prior to installation of this product.
4. This product shall be maintained periodically per manufacturer's printed instructions.
5. The storm water systems shall be accessible for inspection and maintenance purposes.
6. A permit from Watershed Protection Division (Phone #: 213-482-7066), Department of Public Works, shall be required for each installation.
7. Each storm water quality device shall be permanently identified with the name "Kristar Enterprises," and appropriate model number.

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RR-5634

APPENDIX G

Pipe Capacity Calculations

Table
Rating Table for Circular Channel

Project Description	
Project File	c:\haestad\fmw\4209 pip.fm2
Worksheet	CMH-Preliminary Pipe Sizing
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Capacity

Constant Data	
Mannings Coefficient	0.013

Input Data			
	Minimum	Maximum	Increment
Channel Slope	0.007000	0.020000	0.002000 ft/ft
Diameter	12.00	36.00	2.00 in

Rating Table				
Diameter (in)	Channel Slope (ft/ft)	Depth (ft)	Discharge (cfs)	Velocity (ft/s)
12.00	0.007000	1.00	2.98	3.80
12.00	0.009000	1.00	3.38	4.30
12.00	0.011000	1.00	3.74	4.76
12.00	0.013000	1.00	4.06	5.17
12.00	0.015000	1.00	4.36	5.56
12.00	0.017000	1.00	4.65	5.91
12.00	0.019000	1.00	4.91	6.25
12.00	0.021000	1.00	5.16	6.57
14.00	0.007000	1.17	4.50	4.21
14.00	0.009000	1.17	5.10	4.77
14.00	0.011000	1.17	5.64	5.27
14.00	0.013000	1.17	6.13	5.73
14.00	0.015000	1.17	6.58	6.16
14.00	0.017000	1.17	7.01	6.55
14.00	0.019000	1.17	7.41	6.93
14.00	0.021000	1.17	7.79	7.28
16.00	0.007000	1.33	6.42	4.60
16.00	0.009000	1.33	7.28	5.21
16.00	0.011000	1.33	8.05	5.76
16.00	0.013000	1.33	8.75	6.27
16.00	0.015000	1.33	9.40	6.73
16.00	0.017000	1.33	10.00	7.16
16.00	0.019000	1.33	10.58	7.57
16.00	0.021000	1.33	11.12	7.96
18.00	0.007000	1.50	8.79	4.97
18.00	0.009000	1.50	9.96	5.64
18.00	0.011000	1.50	11.02	6.23
18.00	0.013000	1.50	11.98	6.78

Table
Rating Table for Circular Channel

Rating Table				
Diameter (in)	Channel Slope (ft/ft)	Depth (ft)	Discharge (cfs)	Velocity (ft/s)
18.00	0.015000	1.50	12.86	7.28
18.00	0.017000	1.50	13.70	7.75
18.00	0.019000	1.50	14.48	8.19
18.00	0.021000	1.50	15.22	8.61
20.00	0.007000	1.67	11.64	5.33
20.00	0.009000	1.67	13.20	6.05
20.00	0.011000	1.67	14.59	6.69
20.00	0.013000	1.67	15.86	7.27
20.00	0.015000	1.67	17.04	7.81
20.00	0.017000	1.67	18.14	8.31
20.00	0.019000	1.67	19.18	8.79
20.00	0.021000	1.67	20.16	9.24
22.00	0.007000	1.83	15.01	5.68
22.00	0.009000	1.83	17.02	6.45
22.00	0.011000	1.83	18.81	7.13
22.00	0.013000	1.83	20.45	7.75
22.00	0.015000	1.83	21.97	8.32
22.00	0.017000	1.83	23.39	8.86
22.00	0.019000	1.83	24.72	9.37
22.00	0.021000	1.83	25.99	9.85
24.00	0.007000	2.00	18.93	6.02
24.00	0.009000	2.00	21.46	6.83
24.00	0.011000	2.00	23.73	7.55
24.00	0.013000	2.00	25.79	8.21
24.00	0.015000	2.00	27.71	8.82
24.00	0.017000	2.00	29.49	9.39
24.00	0.019000	2.00	31.18	9.93
24.00	0.021000	2.00	32.78	10.43
26.00	0.007000	2.17	23.43	6.35
26.00	0.009000	2.17	26.57	7.21
26.00	0.011000	2.17	29.37	7.97
26.00	0.013000	2.17	31.93	8.66
26.00	0.015000	2.17	34.30	9.30
26.00	0.017000	2.17	36.51	9.90
26.00	0.019000	2.17	38.60	10.47
26.00	0.021000	2.17	40.58	11.01
28.00	0.007000	2.33	28.55	6.68
28.00	0.009000	2.33	32.37	7.57
28.00	0.011000	2.33	35.79	8.37
28.00	0.013000	2.33	38.91	9.10
28.00	0.015000	2.33	41.79	9.77
28.00	0.017000	2.33	44.49	10.40
28.00	0.019000	2.33	47.03	11.00
28.00	0.021000	2.33	49.45	11.56
30.00	0.007000	2.50	34.32	6.99
30.00	0.009000	2.50	38.91	7.93
30.00	0.011000	2.50	43.02	8.76

Table
Rating Table for Circular Channel

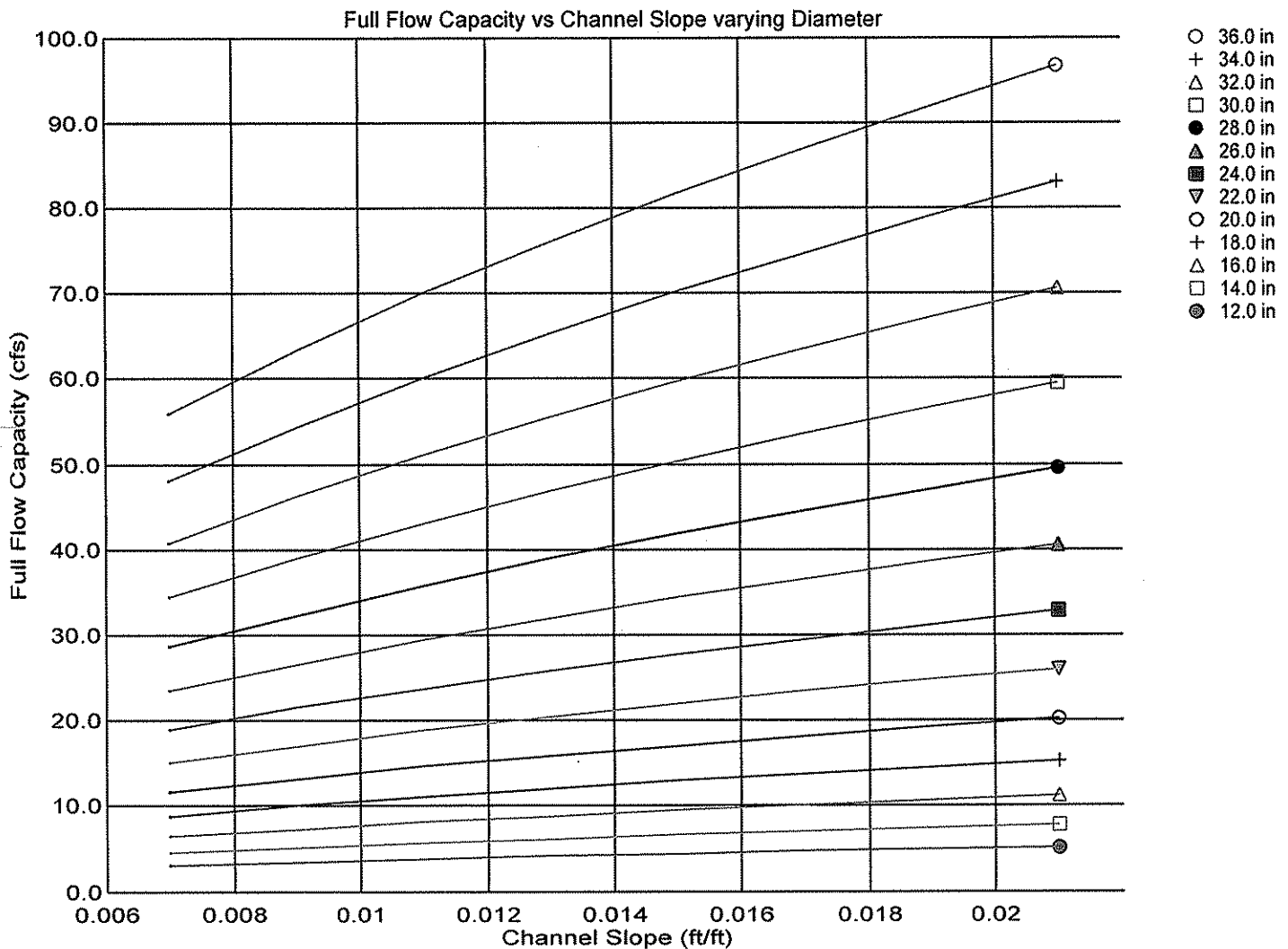
Rating Table				
Diameter (in)	Channel Slope (ft/ft)	Depth (ft)	Discharge (cfs)	Velocity (ft/s)
30.00	0.013000	2.50	46.76	9.53
30.00	0.015000	2.50	50.23	10.23
30.00	0.017000	2.50	53.48	10.89
30.00	0.019000	2.50	56.54	11.52
30.00	0.021000	2.50	59.44	12.11
32.00	0.007000	2.67	40.76	7.30
32.00	0.009000	2.67	46.22	8.28
32.00	0.011000	2.67	51.10	9.15
32.00	0.013000	2.67	55.55	9.95
32.00	0.015000	2.67	59.67	10.68
32.00	0.017000	2.67	63.52	11.37
32.00	0.019000	2.67	67.15	12.02
32.00	0.021000	2.67	70.60	12.64
34.00	0.007000	2.83	47.91	7.60
34.00	0.009000	2.83	54.33	8.62
34.00	0.011000	2.83	60.06	9.53
34.00	0.013000	2.83	65.29	10.36
34.00	0.015000	2.83	70.14	11.12
34.00	0.017000	2.83	74.67	11.84
34.00	0.019000	2.83	78.94	12.52
34.00	0.021000	2.83	82.99	13.16
36.00	0.007000	3.00	55.80	7.89
36.00	0.009000	3.00	63.27	8.95
36.00	0.011000	3.00	69.95	9.90
36.00	0.013000	3.00	76.04	10.76
36.00	0.015000	3.00	81.68	11.56
36.00	0.017000	3.00	86.96	12.30
36.00	0.019000	3.00	91.93	13.01
36.00	0.021000	3.00	96.65	13.67

Curve Plotted Curves for Circular Channel

Project Description	
Project File	c:\haestad\fmw\4209 pip.fm2
Worksheet	CMH-Preliminary Pipe Sizing
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Full Flow Capacity

Constant Data	
Mannings Coefficient	0.013

Input Data			
	Minimum	Maximum	Increment
Channel Slope	0.007000	0.020000	0.002000 ft/ft
Diameter	12.00	36.00	2.00 in



Appendix I

Phase I Archaeological Study



A Phase 1 Archaeological Study
For the Proposed Community Memorial Hospital Improvements Project
City of Ventura, County of Ventura, California

Prepared for:



Rincon Consultants, Inc.
790 East Santa Clara Street
Ventura, California 93001
Phone: 805-641-1000 - Fax: 805-641-1072

Prepared and submitted by:



Robert J. Wlodarski
Principal Investigator

Historical, Environmental, Archaeological, Research, Team
M.A. /RPA and CCPH Certified in History, Archaeology and Architectural History
Meets National Park Service standards & guidelines for Archaeology and Historic Preservation
Member of the National Council on Public History
8701 Lava Place, West Hills, California 91304-2126
Phone/Fax: 818-340-6676
E-mail: robanne@ix.netcom.com

March, 2010

Summary of Findings

At the request of Rincon Consultants, Inc., Ventura, California, A Phase 1 Archaeological Study was prepared in support of an environmental document for the Proposed Community Memorial Hospital Improvements Project, City of Ventura, County of Ventura, California. This document is intended to assist the client in achieving compliance with the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA) and the County of Ventura, Department of Regional Planning, guidelines, policies and procedures pertaining to the completion of cultural resource investigations within its purview. The scope of work consisted of:

1. Performing a records search at the South Central Coastal Information Center, California State University Fullerton.
2. Conducting an on-foot surface reconnaissance of the entire project area.
3. Preparing a report summarizing the results of the records search and field phases.

The project is located in the City of Ventura, Ventura County California (Figure 1). More specifically, the developed parcel is depicted on the Ventura, California 7.5 minute USGS Map (1951-photorevised 1967) within Township 3 North, Range 23 West, in an unsectioned portion of Rancho Santa Paula y Saticoy (Figure 2). The project area encompasses about 14 acres and is roughly triangular in shape. It is located in the Midtown area of the City and is bounded by Loma Vista Road to the north and Brent Street to the east. The western boundary of the Project Area corresponds to Main Street. However, a portion of the Project Area (Main Street fronting parcels and Midtown Corridor corner parcels) will not be subject to the CMH Code (Figure 3). The proposed Hospital District is currently occupied by an eight-story, hospital building, smaller hospital-owned properties on the south side of the main hospital building along Cabrillo Drive, commercial and residential buildings along Brent Street, and parking facilities. The Hospital District vicinity includes residential neighborhoods to the north and east, while commercial retail and medical office uses are situated along Main Street, Loma Vista Road, North Brent Street and Thompson Boulevard (Figure 4). Parcels within the project area comprise about 14 acres of land. Parcels within the Hospital District comprise about 10 acres (Figure 5).

A record search performed by RPA certified archaeologist Wayne Bonner on March 24, 2010, at the South Central Coastal Information Center, California State University Fullerton, yielded no previously recorded prehistoric or historic archaeological site or historic properties within the project area. In addition, the following results apply to a 0.5-mile radius of the project area:

- No prehistoric archaeological sites are recorded.
- No historic archaeological sites or historic properties are recorded
- No cultural resource studies have been documented, suggesting that the project area has never undergone a systematic archaeological study by a qualified archaeologist.
- No California Register of Historic Resources exist (1992, with supplemental information to date).
- No California Historical Landmarks are listed (1995, with supplemental information to date).
- No California Points of Historical Interest are noted (1992, with supplemental information to date).
- No State Historic Resources Commission issues are presented (1980-present. Minutes from quarterly meeting).
- A formal letter was sent to the Native American Heritage Commission (NAHC), 915 Capitol Mall, Room 364, Sacramento, California 95814 on March 25, 2010. The letter request was for a search into sacred land files and other documents that might provide information on the level of Native American sensitivity for the project area. A letter response was received on March 26, 2010 by Katy Sanchez, Program Analyst indicating that the NAHC record search of the sacred lands files failed to indicate the presence of Native American cultural resources in the immediate project area.
- Additional research was conducted through consultation with the Ventura County Assessors Office; Ventura County Cultural Heritage Board; Ventura County Engineering Department; Ventura County Planning Department; and Department of Geography Historic Map Reference Center, California State University Northridge). The following historic information was reviewed:
 - 1890-1915 - Charles Outland - Historical Index for Ventura
 - 1898-1995 - City directories
 - 1904 - Ventura 15-minute USGS topographic map (surveyed in 1900-1901)
 - 1911 - Historical Atlas of Ventura County

- 1941 - Ventura USGS topographic Map
- 1951 - Ventura USGS topographic Map
- 1967 - Ventura USGS Topographic Map

A pedestrian survey of the project area was performed by the author with the assistance of RPA certified professional archaeologist, Wayne Bonner, on March 27, 2010. The project areal was thoroughly inspected for surface cultural resource remains. During a pedestrian survey, the following field observations were made:

- The project area encompasses about 14 acres of developed land and is roughly triangular in shape.
- The subject property is located in the Midtown area of the City and is bounded by Loma Vista Road to the north and Brent Street to the east.
- The western boundary of the project area corresponds to Main Street. However, a portion of the property (Main Street fronting parcels and Midtown Corridor corner parcels) will not be subject to the CMH Code.
- The proposed Hospital District is currently occupied by an eight-story, hospital building, smaller hospital-owned properties on the south side of the main hospital building along Cabrillo Drive, commercial and residential buildings along Brent Street, and parking facilities.
- The area surrounding the Hospital District is dominated by residential neighborhoods to the north and east, while commercial retail and medical office uses are situated along Main Street, Loma Vista Road, North Brent Street and Thompson Boulevard.
- Parcels within the project area comprise about 14 acres of land.
- Parcels within the Hospital District comprise about 10 acres of land.
- The entire parcel has been extensively disturbed by the construction of the hospital complex, parking areas, landscaping and streetscape environment (inclusive of sidewalks, lighting, driveway entrances, signage, gutters, paved roadways, sprinkler systems and underground utilities), and commercial and residential properties.
- Ground surface visibility was poor throughout the project area due to existing structures, parking areas, and other paved areas. Therefore, the survey consisted of the inspection of all open landscaped areas, or cleared areas that provided access to surface soils.

All exposed terrain and fortuitous exposures such as rodent burrows, and excavated or cleared areas, were thoroughly inspected for signs of cultural resources. The results of the Phase 1 archaeological study yielded no indications of prehistoric or historic archaeological resources within the project area. Plate 1 illustrates selected views of the subject property.

Any proposed improvements within the property will have no adverse impacts on known cultural resources. No additional hindrances affected the results of this survey, and no conditions are placed on the project based on the results of this study. The nature of a walkover can only confidently assess the potential for encountering surface cultural resource remains; therefore, customary caution is advised in developing within the project area. Should unanticipated cultural resource remains be encountered during land modification activities, work must cease, and the Planning Department contacted immediately to determine appropriate measures to mitigate adverse impacts to the discovered resources. Cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits.

If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of the Native American Heritage Commission.

Table of Contents

<u>Title</u>	<u>Page</u>
Summary of Findings	ii
I. Introduction	1
1.1 Purpose and scope of the project	1
1.2 Location and description of the project	1
II. Environmental Information	4
III. Cultural Overview	4
3.1 Prehistory/Protohistory	4
3.2 Ethnographic Information	4
3.3 History	5
IV. Background Research Synthesis	6
V. Field Reconnaissance Program	7
5.1 Methodology	7
5.2 Crew	7
5.3 Results	7
5.4 Recommendations	9
VI. References	9

List of Figures

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	Vicinity Map	1
2	Location of the Survey	2
3	Aerial View of the Project Area Looking North	2
4	Zoning Map	3
5	Parcel Map	3

List of Plates

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	Selected Views of the Project Area	7

I. Introduction

1.1 Purpose and Scope of the Project

At the request of Rincon Consultants, Inc., Ventura, California, A Phase 1 Archaeological Study was prepared in support of an environmental document for the Proposed Community Memorial Hospital Improvements Project, City of Ventura, County of Ventura, California. This document is intended to assist the client in achieving compliance with the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA) and the County of Ventura, Department of Regional Planning, guidelines, policies and procedures pertaining to the completion of cultural resource investigations within its purview. The scope of work consisted of:

1. Performing a records search at the South Central Coastal Information Center, California State University Fullerton.
2. Conducting an on-foot surface reconnaissance of the entire project area.
3. Preparing a report summarizing the results of the records search and field phases.

1.2 Purpose and Scope of the Project

The project is located in the City of Ventura, Ventura County California (Figure 1).



Figure 1: Vicinity Map

More specifically, the developed parcel is depicted on the Ventura, California 7.5 minute USGS Map (1951-photorevised 1967) within Township 3 North, Range 23 West, in an unsectioned portion of Rancho Santa Paula y Saticoy (Figure 2).

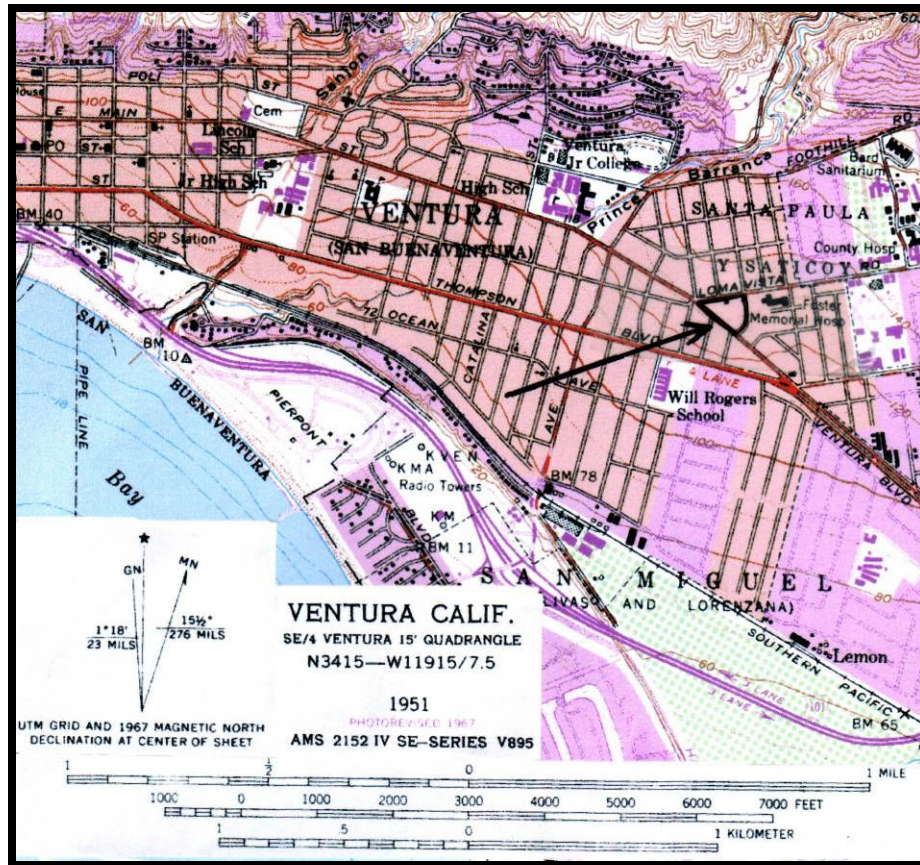


Figure 2: Location of the Survey

The project area encompasses about 14 acres and is roughly triangular in shape. It is located in the Midtown area of the City and is bounded by Loma Vista Road to the north and Brent Street to the east. The western boundary of the Project Area corresponds to Main Street. However, a portion of the Project Area (Main Street fronting parcels and Midtown Corridor corner parcels) will not be subject to the CMH Code (Figure 3).

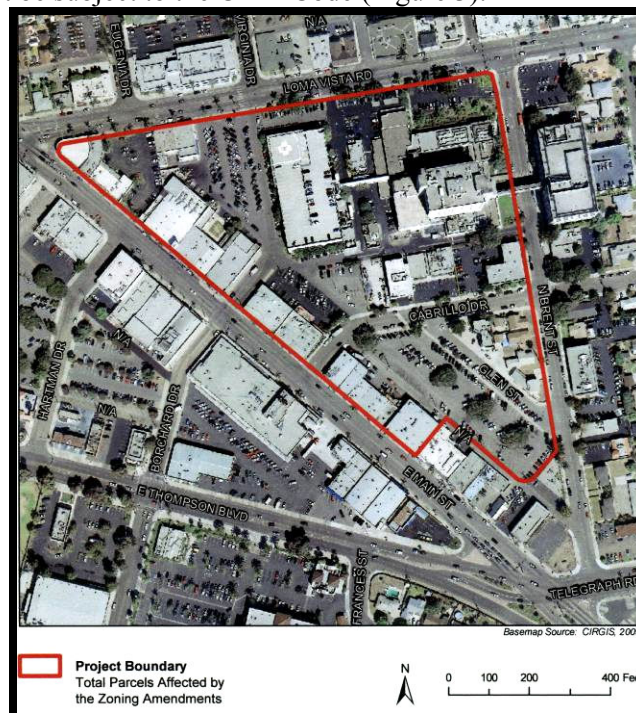


Figure 3: Aerial View of the Project Area Looking North

The proposed Hospital District is currently occupied by an eight-story, hospital building, smaller hospital-owned properties on the south side of the main hospital building along Cabrillo Drive, commercial and residential buildings along Brent Street, and parking facilities. The Hospital District vicinity includes residential neighborhoods to the north and east, while commercial retail and medical office uses are situated along Main Street, Loma Vista Road, North Brent Street and Thompson Boulevard (Figure 4).

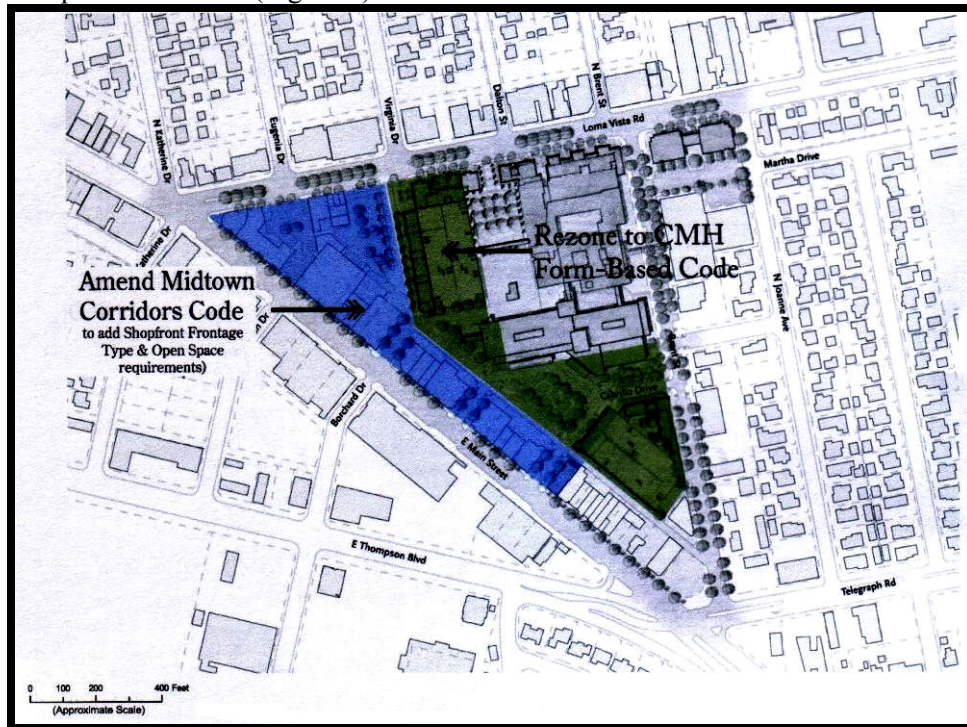


Figure 4: Zoning Map

Parcels within the project area comprise about 14 acres of land. Parcels within the Hospital District comprise about 10 acres (Figure 5).

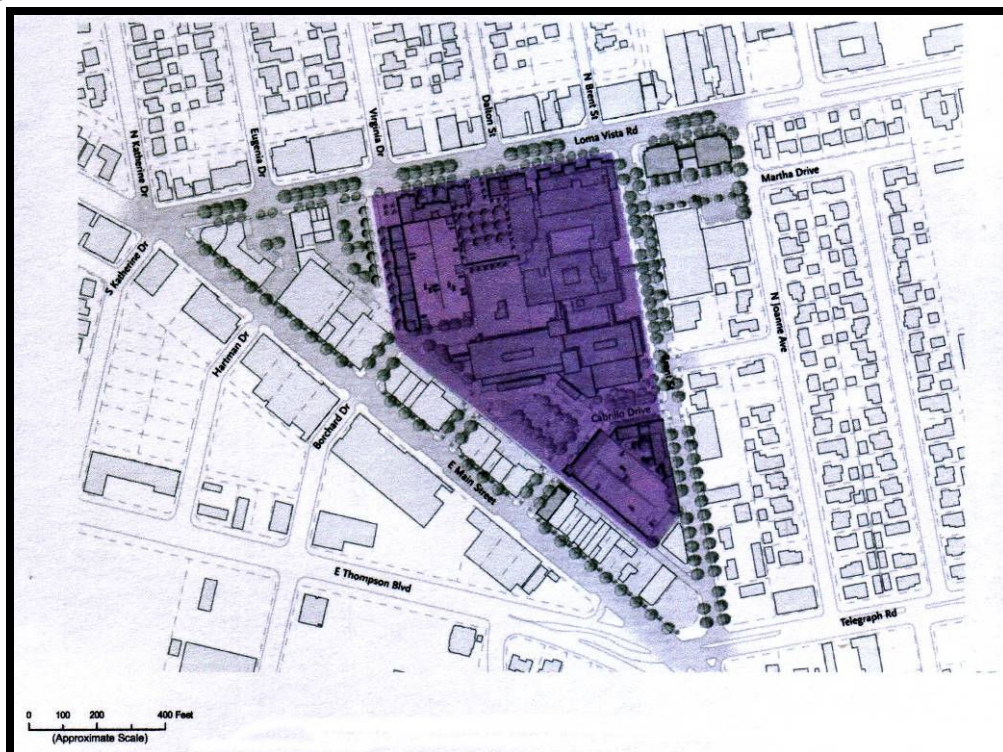


Figure 5: Parcel Map

II.

Environmental Information

The property lies within Ventura Basin and Transverse Range Geomorphic Province, which is characterized by mountains cut by narrow alluvial valleys and broad plains and is dominated by the Santa Clara River-Ventura drainages. Local mountains composed of Eocene, Miocene, Pliocene and Pleistocene age deposits and contained minerals exploited by the Chumash, including: sandstone, basalt, andesite, chert, quartzite and fused shale. Agriculture has been an essential element in the historical development of Ventura and the adjacent Oxnard Plain, with highly suitable soils due to their high mineral content, drainage capabilities and loamy quality. The region is classified as "Mediterranean warm" lying between the dry Mojave Desert and the humid Pacific Coast. Weather consists of warm, dry summers and mild, moderately wet winters. Temperatures range from 100 degrees in July and August, to the low 30s in January. Snowfall is rare and rainfall normally occurs between November and April. The Ventura River and Santa Clara River and Calleguas Creek dominate the Oxnard Plain, contributing most of the water to the urban and rural landscape. Several other minor drainages flow south from the hills. Understanding the hydrology of Santa Clara River drainage is important for the interpretation prehistoric and historic settlement patterns. Regional vegetation includes: **Riparian** (Ventura River and Santa Clara River); **Sage-Scrub** (South Mountain and canyons); **Oak-Woodland** (scattered on north-facing slopes at lower elevations); and **Grassland** (grazed lands). Historically, the local landscape was predominantly agricultural, while currently, much of the local landscape has been converted into residential and commercial developments. The prehistoric inhabitants utilized plants from numerous regional biotic communities including acorns, sage, buckwheat, chia, yucca, lemonadeberry and elderberry. Willow was used in house construction, and reeds utilized for basketry. Plants were also exploited as medicines and dyes (mugwort, tree tobacco, nightshade, and sage). Historically, numerous animals and birds inhabited the region, including, mule deer, coyote, bobcat, bear, bighorn sheep, wolf, puma, raccoon, fox, snakes, lizards, frogs, woodpecker, hummingbird, hawk, golden eagle and condor.

III.

Cultural Overview

3.1 Prehistory/Protohistory

At Contact, the region was occupied by the Chumash, a diverse population living in autonomous settlements along the California coast from Malibu Creek to the southeast, Estero Bay in the north, including the islands of San Miguel, Santa Rosa, and Santa Cruz, and as far as Tejon Pass, Lake Casitas and the Cuyama River inland (Kroeber 1925; Landberg 1965; Grant 1978; Santa Barbara Museum of Natural History 1986, 1991; Miller 1988; and, Gibson 1991).

Chumash society became increasingly complex over the last 9,000 years (Wallace 1955, Warren 1968). Warren revised Wallace's scheme to include variants and traditions enhanced by radiocarbon dates. King (1982) proposed sequences based on changes in ornaments, beads and other artifacts. After A.D. 1000, changes in bead types suggested the evolution of new economic subsystems, which contributed to the highly developed economic system observed by early Spanish explorers. Following the 1542 Cabrillo voyage numerous small Chumash settlements were abandoned and large historic towns were founded. This change in population distribution is attributed to growth in importance of trade centers and the development of more integrated political confederations that encouraged trade. The Chumash economic system enabled them to make efficient use of diverse environments within their territory. Most mainland plants and animals used as food were completely absent or present in low densities on the Channel Islands. Easily stored foods were traded between the islands, mainland, and interior populations who lacked marine resources traded with coastal populations for fish and other seafood. Most religious ceremonies had their roots in the Early Period when objects similar to those used historically were placed in mortuary associations or owned by religious leaders. Other sources include Leonard (1971), C. King (1994, 2000), Hudson et al. (1977), Hudson & Underhay (1978), Hudson (1979), Hudson and Blackburn (1979-87); Carrico and Wlodarski (1983); and Dillon & Boxt (1989).

3.2 Ethnographic Information

The Chumash were viewed as unique among California Indians by the Spanish due to their knowledge of the sea, canoe building expertise, ritual and ceremonial organization, their interest in acquiring and displaying possessions, willingness to work and their extensive trade networks. The protohistoric Chumash maintained the most complex bead money system documented in the world (King 1982). Information obtained by Schumacher & Bowers in 1877-1878; Rogers in the 1920s; Harrington in the 1930s; and Woodward and Van Valkenburgh in the late 1920s and 1930s, suggests that the Chumash were divided into political provinces, each containing a capital. Based on King (1975) and Applegate (1974, 1975), the following placenames exist near the project area:

Alalehue

Mission period village on Santa Clara River between Santa Paula and Fillmore

Aliwolhoyoy	"one that falls" - a waterfall in Upper Santa Paula Canyon
Chi'ap ishti'in	"house of the dogs" - in hills east of Santa Paula/south of Santa Clara River
Honmoyoyo	"gorge" - deep canyon east of Ventura
Ihsha	"Ashes" - major Rancheria at the mouth of the Santa Clara River
Iswey	"the cut" - Mouth of the Santa Clara River
Kanaputeknan	A historic village near the mouth of the Santa Clara River
Kasunalmu	"sending place" - Historic village near Union High west of Oxnard
Kawach'iwshmu	"archery-match place"-place on Santa Paula Creek north of Mud Creek
Mahahal	"new village" - A village on the Santa Clara River near Sespe
Mupu	"hole in the ground, or "cave"? - Village on Santa Paula Creek above Santa Paula
Ponom	Freshwater marsh (?) near the Santa Clara Cemetery
Sa' aqtik'oy	"place sheltered from the wind" - village at Saticoy
S'aqtik'oy	"Place sheltered from the wind" - village on the Vanoni Ranch in Saticoy
Shisholop	"in the mud" - a coastal village just south of Ventura
Wene'mu	"sleeping place" - village at what is now Hueneme.

Chumash culture underwent dramatic changes following European contact. Diseases quickly decimated the Native Americans and most Chumash villages were abandoned by 1810. Most Chumash who survived helped build the Spanish Missions and worked the Mexican and American ranchos that followed. Several thousand Chumash live in Ventura, Santa Barbara and San Luis Obispo counties, and place a high value on objects and places associated with their past, namely archaeological sites and artifacts. They are also concerned with preserving their cultural heritage.

3.3 History

During August 1769, a military contingent of Spanish explorers under the leadership of Don Gaspar de Portola passed through the lower Santa Clara River Valley. The diaries of Miguel Costanso, Fray Juan Crespi, and Pedro Fages identified three villages in the valley during the journey from Castaic (Rancheria del Corral) to the Ventura River. Spanish chroniclers noted the differences in village organization from east to west along the Rio de Santa Clara; the villages situated east of Santa Paula Creek were dissimilar in pattern and structure from those documented to the west. Cultural differences would seem to be an unlikely explanation, since throughout this area thatched or domed houses were used as shelter in permanent or semi-permanent village sites.

Twenty-one missions were established between 1769 and 1823. They were all about a day's ride from one another along the Camino Real, which connected San Diego with Solano. Father Junipero Serra founded Mission San Buenaventura in 1782, forming the basis of what would become the city. The mission was named for St. Bonaventure, a Thirteenth Century Franciscan saint and a Doctor of the Church. Native Americans were slowly assimilated into the missions through recruitment from their villages. During this period, introduced diseases decimated many Native American tribes. Following the decline of the missions, large land grants became ranchos. On July 6, 1841, Governor Juan Bautista Alvarado granted Rancho San Miguel to Felipe Lorenzana and Raymundo Olivas, whose Olivas Adobe on the banks of the Santa Clara River was the most magnificent hacienda south of Monterey.

After the American Civil War, settlers came to the area, buying land from the Mexicans, or simply as squatters. Vast holdings were later acquired by Easterners, including the railroad magnate, Thomas Scott. He was impressed by one of the young employees, Thomas R. Bard, who had been in charge of train supplies to Union troops, and Bard was sent west to handle Scott's property. Not easily accessible, Ventura was not a target of immigrants, and as such, remained quiet and rural. For most of the century that followed the incorporation of Ventura in 1866, it remained isolated from the rest of the state. With the advent of stagecoach travel, passengers between Los Angeles and San Francisco were carried by three connecting lines: Flint Bixby's Coast Line Stages to San Buenaventura, Santa Barbara, San Luis Obispo and the rail connection at Salinas; Sam Harper's Atlantic and Pacific Stage Line between Lyons Station just south of Newhall and San Buenaventura, and Telegraph Stages, operating between Los Angeles and the Southern Pacific railhead in the San Joaquin Valley, the Owens Valley, and the Cerro Gordo. Until the Southern Pacific lines joined farther up Soledad Canyon at Lang, the Telegraph Line delivered mail between San Buenaventura and Los Angeles by dropping it off at the Southern Pacific railhead at San Fernando. Going in the opposite direction, the Coast Line would take the mail between Soledad and San Buenaventura. Just as the technology of the late 19th century ended the isolation of the region, by the early 1900s, the automobile signaled a new era. With the coming of the freeway, growth between Los Angeles and Ventura grew exponentially.

Bard is often regarded as the Father of Ventura and his descendants have been prominently identified with the growth of Ventura County. The Union Oil Company was organized with Bard as President in 1890. The large Ventura Oil Field was first drilled in 1919 and at its peak produced 90,000 barrels per day. The city is located between the Ventura River and the Santa Clara River, leading to soil so fertile that citrus grew better here than anywhere else in the state. The citrus farmers formed Sunkist Growers, Incorporated, the world's largest organization of citrus production.

From the south, travel by auto was slow and hazardous, until the completion of a four-lane freeway (US Highway 101) over the Conejo Grade in 1959. This route, now further widened and improved by 1969, is known as the Ventura Freeway, which directly links Ventura with the Los Angeles metropolitan area. Another route, US Highway 101 ALT (now the Pacific Coast Highway) traveled along the coast from Santa Monica via Oxnard, but was not heavily used. From the north, entrance was by way of a single road along the beach and stagecoach passengers either had to wait until low tide when the horses could cross on the exposed wet sand, or go up the Ventura River Valley and then cross over the mountains to Santa Barbara via Casitas Pass, a long and difficult trip. Inland, Ventura was hemmed in by (what is now) the Los Padres National Forest, composed of mountainous country and deep canyons. This route became passable with the completion of the Maricopa Highway (Hwy 33) in the 1930s. Since then, Ventura has grown steadily. In 1920 there were 4,156 people. In 1930 the population had increased to 11,603, by 1950 the population reached 16,643, by 1970 the population was 57,964, and in 1980 the population had increased to 73,774. In the last three decades it has increased to approximately 107,000. What originated in 1901 as a single hospital serving Ventura County has grown into an expansive healthcare system that touches the lives of individuals throughout Ventura County, California and beyond. The Community Memorial Health System, established in 2005 when Community Memorial Hospital in Ventura merged with Ojai Valley Community Hospital, is comprised of these two hospitals along with nine family-practice health centers serving various communities within Ventura County.

IV. Background Research Synthesis

A record search performed by RPA certified archaeologist Wayne Bonner on March 24, 2010, at the South Central Coastal Information Center, California State University Fullerton, yielded no previously recorded prehistoric or historic archaeological site or historic properties within the project area. In addition, the following results apply to a 0.5-mile radius of the project area:

- No prehistoric archaeological sites are recorded.
- No historic archaeological sites or historic properties are recorded
- No cultural resource studies have been documented, suggesting that the project area has never undergone a systematic archaeological study by a qualified archaeologist.
- No California Register of Historic Resources exist (1992, with supplemental information to date).
- No California Historical Landmarks are listed (1995, with supplemental information to date).
- No California Points of Historical Interest are noted (1992, with supplemental information to date).
- No State Historic Resources Commission issues are presented (1980-present. Minutes from quarterly meeting).
- A formal letter was sent to the Native American Heritage Commission (NAHC), 915 Capitol Mall, Room 364, Sacramento, California 95814 on March 25, 2010. The letter request was for a search into sacred land files and other documents that might provide information on the level of Native American sensitivity for the project area. A letter response was received on March 26, 2010 by Katy Sanchez, Program Analyst indicating that the NAHC record search of the sacred lands files failed to indicate the presence of Native American cultural resources in the immediate project area.
- Additional research was conducted through consultation with the Ventura County Assessors Office; Ventura County Cultural Heritage Board; Ventura County Engineering Department; Ventura County Planning Department; and Department of Geography Historic Map Reference Center, California State University Northridge). The following historic information was reviewed:
 - 1890-1915 - Charles Outland - Historical Index for Ventura
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 - 1911 - Historical Atlas of Ventura County
 - 1941 - Ventura USGS topographic Map
 - 1951 - Ventura USGS topographic Map
 - 1967 - Ventura USGS Topographic Map

V. Field Reconnaissance Program

5.1 Methodology

A field reconnaissance which entails the inspection of all land surfaces that can reasonably be expected to contain cultural resource remains without major modification of the land surface was performed on March 27, 2010.

5.2 Crew

The survey crew consisted of Principal Investigator, **Robert Wlodarski** who has a: B.A. in History and Anthropology; M.A. in Anthropology from California State University Northridge (CSUN); 37 years of professional experience in California archaeology; over 1500 projects completed to date; certification in field archaeology, and theoretical /archival research by the Register of Professional Archaeologists [RPA], and; is registered as a California historian by the California Committee for the Promotion of History [CCPH], and meets National Park Service standards & guidelines for Archaeology and Historic Preservation; and, **Wayne Bonner**, with over 38 years of experience in southern California archaeology with an MA in Anthropology from California State University Long Beach, is certified in field archaeology by the Register of Professional Archaeologists [RPA], and meets National Park Service standards & guidelines for Archaeology and Historic Preservation.

5.3 Results

During a pedestrian survey, the following field observations were made:

- The project area encompasses about 14 acres of developed land and is roughly triangular in shape.
- The subject property is located in the Midtown area of the City and is bounded by Loma Vista Road to the north and Brent Street to the east.
- The western boundary of the project area corresponds to Main Street. However, a portion of the property (Main Street fronting parcels and Midtown Corridor corner parcels) will not be subject to the CMH Code.
- The proposed Hospital District is currently occupied by an eight-story, hospital building, smaller hospital-owned properties on the south side of the main hospital building along Cabrillo Drive, commercial and residential buildings along Brent Street, and parking facilities.
- The area surrounding the Hospital District is dominated by residential neighborhoods to the north and east, while commercial retail and medical office uses are situated along Main Street, Loma Vista Road, North Brent Street and Thompson Boulevard.
- Parcels within the project area comprise about 14 acres of land.
- Parcels within the Hospital District comprise about 10 acres of land.
- The entire parcel has been extensively disturbed by the construction of the hospital complex, parking areas, landscaping and streetscape environment (inclusive of sidewalks, lighting, driveway entrances, signage, gutters, paved roadways, sprinkler systems and underground utilities), and commercial and residential properties.
- Ground surface visibility was poor throughout the project area due to existing structures, parking areas, and other paved areas. Therefore, the survey consisted of the inspection of all open landscaped areas, or cleared areas that provided access to surface soils.

All exposed terrain and fortuitous exposures such as rodent burrows, and excavated or cleared areas, were thoroughly inspected for signs of cultural resources. The results of this study indicated no prehistoric or historic archaeological resources within the subject property. Plate 1 illustrates selected photographs taken of the project area.

Plate 1: Selected Views of the Project Area







The results of the Phase 1 archaeological study yielded no indications of prehistoric or historic archaeological resources within the project area..

5.4 Recommendations

Proposed improvements within the project areal will have no physical or visual adverse impacts on known cultural resources. No additional hindrances affected the results of this survey, and no conditions are placed on the project based on the results of this study. The nature of a walkover can only confidently assess the potential for encountering surface cultural resource remains; therefore, customary caution is advised in developing within the project area. Should unanticipated cultural resource remains be encountered during land modification activities, work must cease, and the Planning Director contacted immediately to determine appropriate measures to mitigate adverse impacts to the discovered resources. Cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits.

If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of the Native American Heritage Commission.

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Appendix J

Water Supply Assessment

TABLE OF CONTENTS

	Page
WATER SUPPLY ASSESSMENT INFORMATION	1
Background	1
Project Summary	1
WATER SUPPLY ASSESSMENT	2
SB 610 Applicability	2
Water Supplier	2
UWMP Applicability	2
Water Supplies and Demand	3
Contingency Plans/Water Conservation	12
Entitlements/Regulatory Approvals	14
Project Impacts	15
Conclusion	16
REFERENCES	17
Publications	17

List of Tables

Table 1	Historic and Projected Water Source Supply Availability (Acre Feet)	6
Table 2	Projected Service Area Water Demand (Acre Feet) (Normal Year, Weatherwise)	7
Table 3	Projected Service Area Surplus (AFY) (Normal Year, Weatherwise)	8
Table 4	Single and Multiple Dry Year Supply Reliability and Demand Comparison (Acre Feet)	9
Table 5	Summary of Projected Single Dry Water Year Demand and Supply (Five Year Increments in Acre Feet)	10
Table 6	Summary of Projected Multiple-Dry Three Year Water Demand and Supply (Five Year Increments in Acre Feet)	11
Table 7	Water Shortage Stages and Reduction Goals	12
Table 8	Project Net Increase in Water Demand	15

Appendices

Appendix A City of Ventura 2005 UWMP



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WATER SUPPLY ASSESSMENT INFORMATION

This water supply assessment is provided for the proposed Community Memorial Hospital Replacement Project in the City of Ventura, pursuant to the requirements of Section 10910 of the State Water Code, as amended by Senate Bill No. 610, Chapter 643 (2001).

BACKGROUND

Senate Bill No. 610 (Costa) became effective January 1, 2002. The bill requires a city or county which determines that a "project" (as defined in Water Code § 10912) is subject to the California Environmental Quality Act (CEQA) to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment. The assessment is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts. The assessment must be approved by the governing body of the public water system supplying water to the project. If the projected water demand associated with the project was included as part of the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in the water supply assessment. The bill requires the city or county, if it is not able to identify any public water system that may supply water for the project, to prepare the water supply assessment after a prescribed consultation. If the public water system concludes that water supplies are, or will be, insufficient, plans for acquiring additional water supplies are required to be submitted to the city or county. The city or county must include the water supply assessment in any environmental document prepared for the project pursuant to the act. It also requires the city or county to determine whether project water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

PROJECT SUMMARY

The proposed project includes the construction of a replacement building as well as the adoption of a development code that would guide redevelopment of about 10 acres within the Midtown area of the City. The new seismically conforming hospital building will be constructed in accordance with Senate Bill 1953, the Hospital Facilities Seismic Safety Act, which requires hospitals to meet more stringent seismic safety requirements. The new hospital facility would be a six-story, 356,000 square feet (sf) building with one basement level. The new building would be located south of the existing hospital facility on Brent Street. Capacity of the hospital facility is anticipated to incrementally increase from 242 to 252 licensed hospital beds, and treatment spaces in the Emergency Room will increase from 24 to 40 to increase operational efficiency, decrease waiting room time and increase patient satisfaction. Essential services, as defined by California code, would be relocated to the new replacement building, while non-essential services will remain in the existing building and would utilize 121,000 sf, or approximately 54% of the current facility. It is anticipated that the remaining 104,000 sf of the existing building would be leased to new medical office tenants. The project does not include drilling any new wells.

The proposed project meets the definition of "project" within Water Code section 10912 and is subject to the California Environmental Quality Act (CEQA). Pursuant to CEQA, the City of



Ventura, acting as lead agency, prepared a Draft EIR for the project, which was circulated for public review from March 22, 2010 through May 5, 2010. Subsequent to the Public Review period, additional information was obtained regarding the proposed project, which has been incorporated into a Revised Draft EIR. The Water Supply Assessment is part of this new information. The City of Ventura is the public water system that would supply water to the Community Memorial Hospital District if the project is approved by the City of Ventura. The City would act on this proposed water supply assessment at the same time the City acts on the EIR and the project.

WATER SUPPLY ASSESSMENT

The following is a discussion of local water supply planning as it relates to the applicable requirements of Section 10910 of the State Water Code.

SB 610 APPLICABILITY

Water Code Section 10910(a) states that projects, as defined in Section 10912, are subject to the requirement to prepare a water supply assessment. A “project” under Section 10912 includes a “proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space”. Therefore, since the proposed project includes the construction of a replacement hospital of about 356,000 square feet the requirements of Section 10910 of the California Water Code apply to the proposed project.

WATER SUPPLIER

Water Code Section 10910(b) requires the identification of the public water system that would serve the project. The project site is located within the City of Ventura service area and would be served by the City of Ventura if approved. The City of Ventura obtains its water from several sources, including the Ventura River, Casitas Municipal Water District, United Water Conservation District, the Mound Groundwater Basin, the Oxnard Plain Groundwater Basin, the Santa Paula Groundwater Basin, and the Saticoy Yard Well.

UWMP APPLICABILITY

Water Code Section 10910(c)(l) requires a determination of whether or not the proposed project was included in the most recently adopted urban water management plan (UWMP). The most recently adopted UWMP (2005) for the City of Ventura is included as Appendix A to this Water Supply Assessment. The UWMP projects future demand based on General Plan buildout to the year 2025, with an estimated population increase of 21,208 persons, the addition of 8,258 residences, and the addition of 2,655,000 square feet of commercial development. The proposed project was not specifically identified as a project during the General Plan Update process; however, it can be considered as within the development projections analyzed in the 2005 General Plan EIR.

The proposed project includes the construction of a replacement hospital of about 356,000 square feet, use of 121,000 sf of the existing hospital for non-essential services, backfill of the existing hospital with 104,000 sf of new medical office uses, construction of a 3,900 sf retail liner building and future potential development of up to 162,950 sf of medical office campus style



development. Under Phase I, the entire hospital will not be a new use as the increase is related to 10 new hospital beds and an increase of 16 new emergency room treatment spaces. The existing Hospital operations will be partially moved into the new building and the old building will be re-used as described above.

The General Plan accounted for the addition of 2,655,000 square feet of commercial development. Though not specifically accounted for as a planned project in the 2005 General Plan, the 522,850 square feet of projected new development (356,000 sf hospital + 3,900 sf retail liner + 162,950 sf of Phase II medical office uses) is within the commercial development projections of 2,655,000 square feet analyzed within the 2005 General Plan EIR and generally represents about 20% of the overall future commercial development through 2025. However, the Phase II development is not imminent in that there are no applicants for this development as of now. Nevertheless, these are reasonable estimates of future development within the Hospital District given the CMH Code constraints. They are included here as a measure of conservatism and for consistency since this project and the subsequent EIR analysis involves both a plan level analysis and a project level analysis. It is noted though that Water Supply Assessments pursuant to SB 610 are not as a general rule conducted for plan level analyses.

As a measure of conservatism, the water demand created by this project is considered on its own and as not accounted for under of the 2005 UWMP. Thus, pursuant to SB 610, this WSA is required to evaluate the overall projected supply during normal, single dry and multiple dry years over a period of 20 years.

WATER SUPPLIES AND DEMAND

According to the 2008 Biennial Water Supply Report, the City of Ventura obtains water from the following sources:

1. Ventura River surface and subsurface water intakes and four shallow wells (Foster Park)
2. Casitas Municipal Water District (Casitas)
3. Mound Groundwater Basin
4. Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
5. Santa Paula Ground Water Basin
6. Saticoy Yard Well

Groundwater Basins. Background information from the City's 2005 UWMP on the Mound, Oxnard Plain, and Santa Paula groundwater basins is discussed below.

Mound Groundwater Basin. Currently, two wells supply water from the Mound Groundwater Basin – Victoria Well No. 2, which was installed in 1995 and Mound Well No. 1, which began production in April 2003. Victoria Well No. 1, which was installed in 1982, is considered an inactive well at this time due to maintenance and water quality issues. Projected capital improvement projects for the Mound Basin include a new well and an upgrade to Victoria Well #2. A new well, Mound Well #2, is planned to be similar to Victoria Well No. 2 and is anticipated to have a capacity of approximately 2,500 to 3,000 gpm. In the future Victoria Well No. 2 will receive new electrical equipment to insure production reliability. In March 1996 the City completed a project that included: 1) constructing Mound Basin monitoring wells at Camino Real Park and Marina Park; 2) developing a database from historical records, and 3) identifying potential surpluses within the basin. This project was performed in conjunction with the United Water Conservation District. A report compiled as part of that project indicated that

historical data supports a basin yield of at least 8,000 AFY during drought conditions as long as pumpage is reduced during wet years to allow water levels to recover. It is anticipated that the basin will be able to sustain a higher yield (at least 10,000 AF during drought periods), provided that future wells are located so as not to adversely impact the existing Mound Basin Wells. Using data from Victoria Well No. 2 and Mound Well No. 1, the future water supply from the Mound Basin is assumed to be 5,700 AFY based on 75 percent of the current pumping capacity of 7,600 AFY.

Oxnard Plain Groundwater Basin. Wells near the Buenaventura Golf Course have drawn from the Oxnard Plain Groundwater Basin since 1961. Currently, two wells produce potable water for the City's system with a third well out of service for rehabilitation. This third well is used as an emergency source and will only return to service during a drought. These wells pump from the Fox Canyon aquifer of the Oxnard Plain Groundwater Basin. Average annual yield from the golf course wells over the past 10 years has been about 2,500 AFY. The Fox Canyon Groundwater Management Agency (GMA) was created by state legislation in 1982 to manage local groundwater resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the GMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate and restore the basin to a safe yield. In August 1990, the GMA passed Ordinance No. 5, which requires existing groundwater users to reduce their future well water extractions by five percent every five years until a 25 percent reduction is reached. Long-term production will be about 4,100 AF per year.

The City's baseline allocation was set by the GMA at 5,459 AFY, which was the average extraction from the Golf Course Wells for the period 1985 to 1989. Beginning in 1992, baseline extractions set by the GMA will be reduced in five percent increments until a 25 percent reduction is achieved by all users. It is assumed by the GMA that the 25 percent reduction and improved irrigation efficiencies by agriculture will reduce consumption to meet basin safe yield. Following wet weather conditions, water levels in the City's groundwater basins rise significantly. Reduced water demands reflect a reduction in well production than their assigned historical allocation, which has allowed the City to accumulate 35,447 AF credits in the GMA bank as of December 31, 2004. This storage bank makes it possible for the City to implement operational procedures that will allow the use of its groundwater supplies up to safe yield levels, and to use its banked groundwater credits as an additional supply in the event of a drought. If the City were to use its banked water, it is estimated that the City could extract as much as 5,600 AFY based on 75% of the current pumping capacity of 7,500 AFY.

Santa Paula Groundwater Basin. The Saticoy Water System acquired by the City in 1968 included Saticoy Well No. 1, which draws from the Santa Paula Basin. Due to casing failure, the well was destroyed and replaced in 1991 with a new well designated as Saticoy Well No. 2. This was placed in the same general location. In May 2003 Saticoy Well No. 2 was rehabilitated. The well capacity was reduced to 1,800 gpm. The original well construction was incapable of pumping properly at higher flows. Pumping capacity within the Santa Paula Basin is currently 2,200 AFY based on 75% of the current pumping capacity of 2,900 AFY. However, projected 2005 year-end actuals reflect 91% (2,600 AFY) of pumping capacity. Water from Saticoy Well No. 2 is treated by an iron/manganese conditioning facility.

Production in the Santa Paula Groundwater Basin was 2,183 in 2004. Construction of Saticoy Well No. 3 (expected to be completed in 2010) will improve the water supply to the Saticoy

Treatment Plant. It is expected that Saticoy Well No. 3 will have a pumping capacity of 3,000 AFY based on 75% of the planned pumping capacity of 4,000 AFY. In March 1996, the City ended a five-year stalemate over the future use of the Santa Paula Basin. Under an agreement with the United Water Conservation District and the Santa Paula Pumpers Association (an association of ranchers and businesses), the City can pump on average 3,000 AFY from the Santa Paula Basin. The City is not limited to this allocation in any single year, but may produce seven times its average annual allocation (21,000 AF) over any running seven-year period. In addition, the City may pump an additional 3,000 AFY in case of an emergency resulting from a long-term drought situation.

There are plans to expand the Saticoy Conditioning Facility's capacity, allowing two wells to run together at the same time. The higher output will provide additional supply to the 430-pressure zone, where demand may increase due to proposed development. The future annual production (2010 forward) from the Saticoy Wellfield is estimated to be 3,000 AFY, which is about 75 percent of the maximum design pump capacity (2,500 gpm) for one well.

Water Rights. Water rights for each of the City's water sources are discussed below.

Ventura River. Surface water from the Ventura River is diverted through the City's Foster Park Facilities. The surface diversion, subsurface collector, and four shallow wells within the Ventura River collect water.

Casitas Municipal Water District (Casitas). In July 1995 the City signed an agreement with Casitas, which established the City's minimum purchase at 6,000 AFY.

Mound Groundwater Basin. Two wells supply water from the Mound Groundwater Basin (Victoria Well No. 2 and Mound Well No. 1). These wells are within the United Water Conservation District boundaries and are subject to United's semiannual extraction fees.

Oxnard Plain Groundwater Basin (Fox Canyon Aquifer). Wells near the Buenaventura Golf Course have drawn from the Oxnard Plain Groundwater Basin since 1961. Additional wells have been constructed over the years with the most recent being completed in 1991. Currently, two wells produce potable water for the City's system. The City's existing potable Golf Course Wells pump from the Fox Canyon Aquifer, which is regulated by the Fox Canyon Groundwater Management Agency and United. These wells are subject to Fox Canyon and United extraction fees.

Santa Paula Ground Water Basin. The Saticoy Water System was acquired by the City in 1968. This system includes Saticoy Well No. 1, which draws water from the Santa Paula Basin.

Saticoy Yard Well. In exchange for extraterritorial water service, the County has provided the City a well to offset their water demand. The well is expected to provide not only production capacity for serving the maintenance yard, but also significant additional system capacity. This well pumps from the Oxnard Forebay Basin.

In addition to the water sources listed above, the City holds a State Water Project entitlement of 10,000 acre-feet per year (AFY). To date, the City has not received delivery of its allotment. In 1998 the City became a signatory to the SWP Monterey Amendment. The amendment allows

the City to sell back surplus water to the SWP using a Turn-Back Pool method, which the City has participated in. In 2008, the State allowed one water contractor to sell its surplus SWP water directly to another water contractor (Butte County-Palmdale Agreement). The approval of this agreement has given the City the ability to review its options in short-term sales of its surplus SWP water.

The City manages its water resources conjunctively. Conjunctive use is the practice of first utilizing surface supplies (which are lost to the ocean if not used when they are available) before groundwater supplies (which can be stored for use when the surface supplies are not plentiful). Groundwater is used to provide for seasonal demands and as a source during drought periods. Therefore, the City will generally utilize its water supplies in the following order: Ventura River, Lake Casitas, and groundwater basins. In addition, the City provides reclaimed water from the Ventura Water Reclamation Facility to two municipal golf courses, the Ventura Marina area and private customers for landscape irrigation. The City's Historic and Projected Water Source Supply Availability is shown in Table 1. The City's current water supply is about 28,000 AFY (Table 1). The installation of the Saticoy County Yard Well and Saticoy Well #3 will increase redundancy and increase supply by 2,400 acre-feet/year.

Historic water use by the City's population is estimated at 0.22 AF per capita prior to mandatory water conservation measures such as low-flow plumbing fixtures. Following implementation of these measures, per capita annual water usage for the period between 1994 and 2004 is 0.18 AF. Future projected demand within the City based on population growth is shown in Table 2.

Table 1
Historic and Projected Water Source Supply Availability (Acre Feet) ¹

Year	Surface Water		Ground Water				Total Water Supply
	Lake Casitas ²	Ventura River ³	Mound Basin ⁴	Oxnard Plain Basin ⁵	Santa Paula Basin ⁶	Saticoy County Yard Well ⁷	
1980	7,544	7,276	0	5,198	2,129	0	22,147
1985	9,099	5,493	2,360	6,172	46	0	23,170
1990	6,175	2,859	4,365	5,749	0	0	19,148
1995	1,622	9,042	2,169	2,603	2,594	0	18,030
2000	5,836	6,779	4,579	2,674	1,698	0	21,566
2001	6,292	5,727	4,030	905	2,006	0	18,960
2002	7,127	5,951	3,721	1,978	1,157	0	19,934
2003	4,912	6,722	5,546	2,898	316	0	20,394
2004	6,833	6,118	4,773	2,391	2,183	0	22,298
2005	7,115	1,293	3,716	4,728	2,046	0	18,898
2006	5,398	2,244	4,102	5,348	1,068	0	18,160
2007	6,649	1,966	3,521	5,314	1,263	0	18,713
2008	8,000	6,700	5,700	4,600	3,000	0	28,000
2013	8,000	6,700	5,700	4,100	3,000	2,400	29,900



Table 1
Historic and Projected Water Source Supply Availability (Acre Feet) ¹

Year	Surface Water		Ground Water				Total Water Supply
	Lake Casitas ²	Ventura River ³	Mound Basin ⁴	Oxnard Plain Basin ⁵	Santa Paula Basin ⁶	Saticoy County Yard Well ⁷	
2018	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2023 ⁸	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2028 ⁸	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2033 ⁸	8,000	6,700	5,700	4,100	3,000	2,400	29,900

Source: City of San Buenaventura, 2008 Biennial Water Supply Report, Table 1

¹ Includes treated and raw water; excludes reclaimed water supply.

² Lake Casitas is the City's total past supply including raw water and oil users; projected supply is the City's anticipated water availability for in-district use.

³ Ventura River future supply is the average long-term production per the Evaluation of Long Term Alternative Water Sources, James M. Montgomery, June 1993.

⁴ Mound Basin Future supply is 75 percent of well pump capacity within basin.

⁵ Oxnard Plain Basin future supply is based on GMA restricted extraction limits (rounded to nearest 100 AF)

⁶ Santa Paula Basin future water supply is the pumping allocation of the Stipulated Judgement.

⁷ Saticoy County Yard Well supply is 75% of design maximum pump output capacity. The well is located in the Oxnard Forebay Basin.

⁸ Projections for 2023, 2028, and 2033 were not included in the 2008 UWMP; however, to assure a 20-year projection is included in this analysis, water supply is assumed to remain as allocated in the preceding years.

A comparison of the overall supply as indicated in Table 1 with service area demand as indicated in Table 2 results in a determination that projected available supplies are adequate to meet projected service area demands (see Table 3).

Table 2
Projected Service Area Water Demand (Acre Feet)
(Normal Year, Weatherwise)

Year	Est. Water Service Area Population ¹	Per Capita Usage AFY ²	Treated Water Demand ²	Raw Water Demand ³	Total Water Demand
2008	112,006	0.18	20,161	1,000	21,161
2013	116,920	0.18	21,046	1,000	22,046
2018	122,052	0.18	21,969	1,000	22,969
2023 ⁴	129,744	0.18	23,354	1,000	24,354
2028 ⁴	137,723	0.18	24,790	1,000	25,790
2033	146,193	0.18	26,315	1,000	27,315

Source: Table 4, 2008 Biennial Water Supply Report.

¹ Service Area population from DOF reflecting an average annual growth rate of 0.88% plus a 0.35% average annual growth rate for unincorporated areas that are served by the City's supply and infrastructure (2008 Biennial Water Supply Report).

² Treated water demand is estimated population multiplied by 0.18 AF/capita based on 1994-2007 average post mandatory water conservation per capita use from Table 2, 2008 Biennial Water Supply Report.

³ Raw water demand projections include raw water and oil users. i

⁴ Assumes growth continues at the rate of 0.88% within the City and 0.35% within unincorporated areas served by the City.



Table 3
Projected Service Area Surplus (AFY)
(Normal Year, Weatherwise)

Year	Projected Supply	Projected Demand	Surplus
2008	28,000	21,161	6,839
2013	29,900	22,046	6,954
2018	29,900	22,969	6,931
2023	29,900	24,354	5,546
2028	29,900	25,790	4,110
2033	29,900	27,315	2,585

The residential sector of the City is comprised of single and multi-family residential customers. Residential uses comprise about 64% of the overall consumption (2005 UWMP). The commercial sector is comprised of gas stations, large shopping complexes, auto dealerships, restaurants, business parks, office buildings, hotels, and hospitals. The commercial sector comprises about 23% of the overall consumption (2005 UWMP). The industrial sector is comprised of the food industry and oil production, both of which constitute about 1% of the City's overall consumption (2005 UWMP). The institutional and governmental sectors are relatively stable and consist of the County Seat offices, a jail complex, City offices and yards as well as school facilities and churches. The institutional and governmental sector comprises about 4% of the overall consumption (2005 UWMP). Landscape, Agricultural and Other uses consist of 34 developed parks and 45 miles of linear parkways. In addition there are two 18-hole tournament class public golf courses served by reclaimed water for all turf areas. Agricultural uses served by the City comprise about 0.46% of the overall consumption, while the entire Landscape, Agricultural and Other sector utilizes about 8% of the total consumption (2005 UWMP).

The projected water supply in years 2008 through 2033 appears adequate to serve the demands of the City pursuant to planned growth increases, consistent with the 2005 General Plan, as the surplus of available water ranges from a low of 2,585 AFY in 2033 to a high of 6,954 AFY in 2013. In drought conditions, water supplies may be reduced as a result of reduced precipitation. The 2005 UWMP evaluated a three-year drought scenario to determine the City's ability to supply water under drought conditions. The City assumed that severe drought conditions (no rain and above average temperatures) would begin immediately and continue for three consecutive years. Planned water sources for fiscal year 2005, reflecting capacity of current facilities were used as an average normal water year base for estimating purposes. It was also assumed that demand would not be reduced in response to the drought conditions. Available water supplies during the three year period were projected considering: 1) the current status of each existing source; and 2) the past response of each existing source to similar drought conditions. The single dry and multiple dry year supply and demand comparisons are

shown in Table 4. Analysis of single dry water year supply vs. projected demand over a 20-year period is shown in Table 5.

Table 4
Single and Multiple Dry Year
Supply Reliability and Demand Comparison (Acre Feet)

Source	Average/Normal Water Year ¹	Single Dry Water Year ²	Multiple Dry Years		
			Year 1	Year 2	Year 3
Ventura River ³	6,700	2,859	2,859	1,430	700
Casitas ⁴	8,000	7,090	7,090	7,090	4,960
Oxnard Plain GW ⁵	4,600	4,400	4,400	4,400	4,400
Mound Basin GW ⁶	5,700	4,365	4,365	2,838	2,270
Santa Paula GW ⁷	2,600	3,000	3,000	3,000	3,000
Saticoy County Yard Well ⁸	0	1,800	1,800	900	675
Total Source Capacity	27,600	23,514	23,514	19,658	16,005
Less Raw Water Demand ⁹	1,000	1,000	1,000	1,000	1,000
Available Treated Water	26,600	22,514	22,514	18,658	15,005
Total Treated Water Demand ¹⁰	19,766	19,766	19,766	19,937	20,109
Demand Delta	6,834	2,748	2,748	-1,279	-5,104
Banked Groundwater Used ¹¹	0	0	0	1,300	5,120
Surplus Available for Banking ¹²	6,834	2,748	2,748	21	16

Source: Table 6-1, 2005 UWMP

¹ From Table 3-6, 2005 UWMP (See Table 1). Year 2005 data with adjustment to Ventura River to reflect capacity of current facilities with a full basin.

² Rainfall in 1990 was 5.53 inches, well below the yearly average of 15 inches. For a single dry water year, 1990 historical data is used for the Ventura River and Mound Basin (ref. Table 3-6). Casitas reflects Stage 2 allocation, Oxnard source reflects the future available supply per GMA Ordinance. Santa Paula Basin reflects allocated amount per UWCD agreement and Saticoy Yd Well reflects 75% of average year (see Table 3-8).

³ Ventura River available supply in Year 1 reflects the single dry water year. Year 2 is 50% of Year 1. Year 3 is the worst-case available annual yield per the Comprehensive Water Resources Management Plan.

⁴ Casitas available supply during Year 1 and 2 reflects stage 2 allocation with year 3 reflecting stage 5 allocation.

⁵ Oxnard Plain available supply assumed to be the City's allocation at 80% per GMA Extraction Reductions (Table 3-2).

⁶ Mound Basin available supply for year 1 is assumed to be the single dry water year, decreasing in Year 2 by 35% based on 1990/1991 historical data. Year 3 reflects a 20% decrease of year 2.

⁷ Santa Paula Basin Available supply assumed to be City's allocated amount per agreement with UWCD.

⁸ Saticoy County Yard Well year 1 is assumed to be 75% of average year. Year 2 at 50% of year 1 and year 3 at 75% of year 2.

⁹ From Table 4-4, 2005 UWMP (see Table 2).

¹⁰ From Table 4-4, 2005 UWMP (see Table 2). Average and Single Dry Year reflects per capita use of 0.18 to projected 2005 population. The three multiple dry years also reflect 0.18 per capita water uses to extrapolated population estimates. (Population year 1 = 109,812; year 2 = 110,759; year 3 = 111,714).

¹¹ Reduced water demands have allowed the City to store 35,447 AF in the GMA bank at the end of year 2004. The use of banked groundwater would reduce our reserve but allow the City to meet its treated water demand.

¹² Surplus for banking is the lesser of net supply or GMA allocation amount.



Table 5
Summary of Projected Single Dry Water Year Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Single Dry Water Year Supply ³	Difference (Supply-less-demand)
2008	112,006	21,161	25,464	4,303
2013	116,920	22,046	25,464	3,418
2018	122,052	22,969	25,464	2,495
2023	129,744	24,354	25,464	1,110
2028	137,723	25,790	25,464	-326
2033	146,193	27,315	25,464	-1,851

Source: Table 6-2, 2005 UWMP

¹ Projected planning area population is from Table 4, 2008 Biennial Water Supply Report (see Table 2).

² Projected water demand is from Table 4 (see Table 2).

³ Projected water supply is from Table 6-1, 2005 UWMP (see Table 4). For a Single Dry Water Year (23,514 a/f) reduced by 300 a/f, per GMA Extraction Requirement. Plus the New Saticoy Well #3 (Ref. Table 3-8, 2005 UWMP - 2,250 a/f).

Table 6 provides a summary of single dry water years in 5-year increments over twenty years, compared to projected service area water demand. As indicated in Table 6, the existing groundwater banking program would allow the City to draft from the existing banked water, which would meet multiple dry year demands until the year 2030, assuming 5 droughts, each having multiple dry year demands. This scenario assumes that the banked groundwater supply is frozen at the December 2004 supply of 35,447 AF and that groundwater bank contributions do not increase beyond single and multiple dry year banking deposits (maximum of 2,748 AF/Year). However, if normal year groundwater bank deposits occur, such as the 6,834 AF/year surplus (surplus avail. for banking in an Average/Normal Water Year – See Table 4), banked groundwater supplies would be expected to exceed demand in 2030, indicating no cumulative shortage even with a three-year drought every five years.



Table 6
Summary of Projected Multiple-Dry Three Year Water Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Supply Multiple-Dry Water Years ³	Difference (Supply-less-Demand)	Banked Groundwater December 2004	
					Standalone ⁴ 35,447	CUM ⁵ 35,447
2008	112,677	21,282	25,764	4,482	39,929	39,929
2009	113,648	21,457	20,783	-674	39,256	39,256
2010	114,629	21,633	16,549	-5,084	34,171	34,171
2013	116,920	22,046	25,464	3,418	38,739	37,464
2014	118,358	22,304	20,483	-1,821	36,868	35,592
2015	119,814	22,567	16,549	-6,018	30,878	29,603
2018	122,052	22,969	25,464	2,495	37,810	31,965
2019	123,553	23,240	20,483	-2,757	35,001	29,157
2020	125,072	23,513	16,549	-6,964	28,066	22,221
2023	129,744	24,354	25,464	1,110	36,839	23,613
2024	131,340	24,641	20,483	-4,158	33,051	19,825
2025	132,956	24,932	16,549	-8,383	25,128	11,902
2028	137,723	25,790	25,464	326	35,835	12,290
2029	139,417	26,095	20,483	-5,612	31,034	7,489
2030	141,132	26,404	16,549	-9,855	22,091	-1,454

Source: Table 6-4 (2005 UWMP); data for years 2028 through 2030 was extrapolated based on the average annual growth rate of 0.88% plus a 0.35% average annual growth rate for unincorporated areas that are served by the City's supply and infrastructure (2008 Biennial Water Supply Report).

¹ Projected planning area population is from Table 4-3 (2005 UWMP)

² Projected water demand is estimated population multiplied by 0.18 AF/capita based on 1994-2004 average post mandatory water conservation per capita use from Table 4-1 plus 1,000 AF/yr raw water demand.

³ Projected water supply reflects Total Source Capacity from Table 6-1 (2005 UWMP) Multiple Dry Water Years plus the New Saticoy Well #3 (Ref. Table 6-3). Additionally, 2010 forward reflects Fox Canyon GMA Extraction Requirements (Ref. Table 3-2, 2005 UWMP)

⁴ Each consecutive three year period reflects a standalone snapshot over the next twenty years ending in five year increments. Assumes only one of the three-year drought periods occur. For example if a drought occurred in 2013 through 2015 it is assumed that banked GMA credits would be available to support the water demand delta. As of 2007, the City's banked groundwater was 28,821 a/f.

⁵ Reflects a cumulative reduction of banked groundwater for each five-year period over the next twenty years. This assumes five (5), three-year drought periods occur in the next twenty years. In this example the use of banked GMA credits would reduce the reserve, but allow the City to meet its treated water demand until the year 2030.



CONTINGENCY PLANS/WATER CONSERVATION

The City has developed a five-stage water shortage plan that would include voluntary and mandatory stages. The stages are intended to be fair to all water customers with the minimum impact on business, employment and quality of life. The water shortage stages and the reduction goals for each stage are outlined in Table 7.

Table 7
Water Shortage Stages and Reduction Goals

Shortage	Stage	Demand Reduction Goal	Program Type
Up to 10%	Stage 1	10% reduction	Voluntary
10-15%	Stage 2	15% reduction	Mandatory
15-20%	Stage 3	20% reduction	Mandatory
20-30%	Stage 4	30% reduction	Mandatory
30-50%+	Stage 5	50%+ reduction	Mandatory

Source: Table 6-5, 2005 UWMP.

In addition to its continuing water conservation efforts, the City implemented a Toilet Rebate Program and the Water Demand Reduction Offset Program (Water DROP) during the mandatory conservation period (1990-1993). Through the City's Toilet Rebate Program, a water customer received \$80 for replacing each 5 gallon per flush or larger toilet with an ultra low volume toilet. The Water DROP program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alterations are now allowed if the developer offsets their increased water demand at a 3:1 ratio through retrofitting. A 2:1 ratio is required for residential projects. With the lifting of mandatory water conservation, these programs have been discontinued. However, future drought conditions could reactivate these programs once more.

Significant measures of the five-stage water shortage plan include:

Stage 1: 0-10 Percent Reduction Goal (Voluntary)

Public Agency Actions

- Monitor conservation levels and increase public awareness
- Notify customers of shortage conditions and disseminate literature
- Publish customer use goals
- Identify Water Shortage Contingency Plan stages and the possible actions per stage
- Distribute water conservation brochures, information, and conservation kits
- Conduct exterior and interior water audits upon customer requests
- Request voluntary water consumption reduction



- Maintain tiered rate structure to promote water conservation
- Establish/enforce water waste ordinance
- Establish/enforce ordinance prohibiting watering from 9 am to 6 pm

Water Customer Actions

- Monitor own meter for usage
- Implement conservation measures to reduce usage
- Comply with water waste ordinance
- Comply with prohibited watering during 9 am to 6 pm

Stage 2: 10-15 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage):

- Initiate Mandatory Water Conservation Regulations of Ordinance No. 92-07
- Enforce mandatory water consumption goals and allocations for all customers
- Enact water rate surcharge for water consumption over customer allocation. Water in excess of allocation is billed at four times the City's highest water rate. For the third consecutive excessive bill, surcharge is ten times the City's highest water rate. Beyond a third billing period, restrictors placed on meters, at the customer's expense.
- Enactment of allocation adjustment and penalty review programs. Customers can apply for an allocation adjustment for the reasons specified in ordinance.
- Customers may appeal in writing for a waiver of penalties incurred due to a leak or break, incorrect allocation or hardship.

Water Customer Actions (In addition to actions established in previous Stage):

- Comply with mandatory water conservation regulations.
- All water customers requesting an increase in their water allocation must undergo a water audit and install water efficient plumbing for all fixtures at their business or residence.

Stage 3: 15-20 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation guidelines.

Stage 4: 20-30 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.



Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation guidelines.

Stage 5: 30-50+ Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.
- All water use not required for health and safety is prohibited.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation regulations.
- Prohibition of all outside water use unless necessary for the preservation of health and safety and the public welfare.
- Watering with hand-held five gallon maximum bucket, filled at exterior hose bib or interior faucet (not by hose) shall be allowed at any time. This will assist in preserving vegetable gardens or fruit trees. Outdoor use of bath water, dishwater, and laundry water for irrigation purposes is encouraged to the extent this practice is allowed under local health and safety regulations.
- The filling, refilling or adding of water to swimming and/or wading pools is prohibited.
- The operation of any ornamental fountain or similar structure is prohibited.

ENTITLEMENTS/REGULATORY APPROVALS

Water Code Section 10910(d)(2) requires the identification of existing water supply entitlements, water rights, or water service contracts, federal, state, and local permits for construction of necessary infrastructure, and any regulatory approvals required in order to be able to deliver the water supply. The provision of water for the proposed project would require approval from the City of Ventura. The City of Ventura would review the project plans to ensure that there is adequate infrastructure and water supply to serve the project. Building/grading permits would be required from the City of Ventura to install or conduct improvements to water distribution facilities to serve the proposed development. No other federal, state, or local permits for construction of necessary infrastructure associated with delivering the water supply would be required. No regulatory approvals are required in order to convey the water supply to the proposed project, although City Council approval of the Water Supply Assessment would be necessary. If approved, the proposed project would be served by the City of Ventura, which obtains water from various sources including the Ventura River, Casitas Municipal Water District, the Mound Groundwater Basin, the Santa Paula Groundwater Basin, the Oxnard Plain Groundwater Basin, and the Saticoy Yard Well (United Forebay Basin). Existing allotments allow for continued production to meet demand over the 20 year planning horizon. In addition, a State Water Project entitlement of 10,000 AFY also exists, but has not been incorporated into the delivery system.

PROJECT IMPACTS

The proposed Community Memorial Hospital District Development Code facilitates the construction of an imminent project (a replacement hospital building) as well as other probable future development. The CMH Code would facilitate the construction of a new hospital building to house 252 hospital beds, which would essentially absorb the existing 242 beds for a net increase of 10 beds. In addition, the hospital would occupy 121,000 sf of the existing hospital building with non-essential services to support hospital functions, while the remaining 104,000 square feet of the existing hospital would be backfilled with new medical office uses. Other planned Phase I improvements include the construction of a 3,900 square foot retail liner building and construction of street and open space improvements within the Hospital District. Phase II improvements include the probable subsequent construction of an additional 162,950 square feet of new medical office uses in satellite buildings to create a medical services campus. Existing development that would be removed to accommodate new development includes 45,506 square feet of existing medical office uses and four single family residences.

Table 8
Projected Net Increase in Water Demand

Use	Size/Units	Demand Rate	Daily Demand (gpd)	Demand (AFY)
Phase I				
New Hospital	252 beds	406 gpd/bed	102,312	114.7
Hospital Support	121,000 sf	2,664 gpd/acre ¹	7,400	8.3
Medical Office backfill	104,000 sf	2,880 gpd/acre ¹	6,876	7.7
Retail	3,900 sf	2,088 gpd/acre ¹	187	0.2
Subtotal Phase I				130.9
Phase II				
Medical Office	162,950 sf	2,880 gpd/acre ¹	10,774	12.1
Total Phase I and Phase II				112.7
Existing Uses to be Absorbed and Demolished Under Phase I				
Existing Hospital	242 beds	406 gpd/bed	98,252	(110.1)
Existing Medical Office	45,506 sf	2,880 gpd/acre ¹	3,009	(3.4)
Residential	4 SFR	0.18 AFY/person ²	1,671 ³	(1.9)
Subtotal Existing Uses				(115.4)
Net Increase Phase I				15.5
Net Increase Phase II				12.1

Source: Adapted from Jensen Design & Survey, Inc. *Community Memorial Hospital Future Developed Water Demand and Sewage Generation* July 20, 2010; and *Community Memorial Hospital District Development Code EIR*, Section 2.0 *Project Description*, Table 2-4 *Existing Development to be Demolished*.

Notes:

¹ City of Simi Valley Water Master Plan, Table 3-3, 2/1986

² City of San Buenaventura, 2005 UWMP

³ Assumes 2.6 persons/household pursuant to 2005 General Plan



As shown in Table 8, Total Phase I and Phase II development would create demand for about 143 AFY of water. However, because there is 115.4 AFY of existing uses that will be removed, the net increase in demand would be about 27.6 AFY.

CONCLUSION

Though not specifically accounted for as a planned project in the 2005 General Plan, the 522,850 square feet of projected new development (356,000 + 3,900 + 162,950) is within the commercial development projections of 2,655,000 square feet analyzed within the 2005 General Plan EIR and generally represents about 20% of the overall future commercial development through 2025. However, the Phase II development is not imminent in that there are no applicants for this development as of now. Thus, in the short term, the Phase I net increase in water demand will be about 15.5 AFY, while the longer term net increase in Phase II development is estimated at 12.1 AFY. The total overall increase of 27.6 AFY does not exceed normal year surplus indicated in Table 3. Normal year surplus, even with an additional demand of 27.6 AFY would be 2,557 AF in 2030 (see Table 3).

As shown in Table 4, under single dry year conditions, assuming 27.6 AF of water is removed from the 2,748 AF surplus that would be available for banking, 2,720 AF would still be available for banking. Under multiple dry year conditions, banked groundwater would be necessary to serve the project. As shown in Table 6, banked groundwater is sufficient to meet the City's needs until 2030, at which time a shortage would occur pursuant to the analysis assumptions. However, the analysis assumptions are conservative in assuming 5 droughts over a 20 year period, each having multiple dry year demands. Moreover, the scenario assumes that the banked groundwater supply is frozen at the December 2004 supply of 35,447 AF and that groundwater bank contributions do not increase beyond single and multiple dry year banking deposits (maximum of 2,748 AF/Year). However, if normal year groundwater bank deposits occur, such as the 6,834 AF/year surplus (surplus avail. for banking in an Average/Normal Water Year - See Table 4), banked groundwater supplies would be expected to exceed demand in 2030, indicating no cumulative shortage even with a three-year drought every five years. Thus, projected supplies are sufficient to serve an additional 27.6 AFY through 2030 under normal, single dry and multiple dry year conditions.

Lastly, the project includes a number of features that will serve to reduce consumption by the new hospital, which comprises about 75% of the overall demand within the District. As documented in the Project Description within the EIR, the Project is being designed to achieve credits related to the following water conservation techniques under the Green Guide to Healthcare Program.

- WEP1 Non-potable water for equipment cooling
- WE2.1 Water use measurement (separate meters for different uses)
- WE2.2 Motion sensor valves in patient sinks and public toilets
- WE2.5 Condensate reuse

The above measures will contribute to increased water conservation and reduced water demand through reuse of mechanical cooling waters, awareness of demand by metering specific uses, and motion sensors that will respond directly to needs of people.

REFERENCES

PUBLICATIONS

City of San Buenaventura, Department of Public Works. December 2005. Urban Water Management Plan

City of San Buenaventura. 2005. General Plan Final Environmental Impact Report.

City of San Buenaventura. 2008. Biennial Water Supply Assessment Report.

Senate Bill No. 610, Approved by the Governor and filed with the Secretary of State October 9, 2001.



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URBAN WATER MANAGEMENT PLAN

City of San Buenaventura
Department of Public Works

December 2005



City of San Buenaventura 2005 Urban Water Management Plan

Water Utility Information

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TABLE OF CONTENTS

Section 1 - Agency Coordination

1.1 - Plan Adoption	1
1.2 - Public Participation	1
1.3 - Coordination Within the City	2
1.4 - Interagencies	2
1.5 - Water Shortage Emergency Response	4

Section 2 - Contents of Plan

City of San Buenaventura - History and Water Facilities

2.1 - History, Growth and other Demographics	6
2.2 - Climate	7
2.3 - Water Treatment, Distribution Facilities and Service Area	8

Section 3 - Past, Current, and Projected Water Supply

3.1 - Ground Water	12
3.2 - Local Surface Water	16
3.3 - Imported Water	19
3.4 - Recycled Water	20
3.5 - Water Source Supply Summary	20
3.6 - Supplement Water Supplies	22
3.7 - Water Quality	22

Section 4 - Past, Current, and Projected Water Use

4.1 - Water Demand	27
4.2 - Residential Sector	31

4.3 - Commercial Sector	31
4.4 - Industrial Sector	31
4.5 - Institutional/Government Sector	31
4.6 - Landscape/Agricultural/Other Sector	32
4.7 - Supply and Demand Comparison	32
4.8 - Future Supplemental Supply	33

Section 5 - Water Conservation Programs

5.1 - BMP 1 - Water Survey Programs	34
5.2 - BMP 2 - Residential Plumbing Retrofit	35
5.3 - BMP 3 - System Water Audits, Leak Detection and Repair	35
5.4 - BMP 4 - Metering with Commodity Rates	37
5.5 - BMP 5 - Large Landscape Conservation Programs	37
5.6 - BMP 6 - High Efficiency Washing Machine Rebate	38
5.7 - BMP 7 - Public Information	38
5.8 - BMP 8 - School Education Programs	39
5.9 - BMP 9 - Commercial/Industrial Programs	40
5.10 - BMP 10 - Wholesale Agency Programs	40
5.11 - BMP 11 - Conservation Pricing	40
5.12 - BMP 12 - Water Conservation Coordinator	40
5.13 - BMP 13 - Water Waste Prohibition	41
5.14 - BMP 14 - Ultra-Low Flush Toilet Replacement	41
5.15 - City Conservation Resolutions/Ordinances	41
5.16 - Regional Participation	43

Section 6 - Water Shortage Contingency Plan

6.1 - Introduction.....	45
6.2 - Water Supply Reliability.....	45
6.3 - Three Year Worst Case Scenario.....	46
6.4 - Rationing Stages and Reduction Goals.....	51
6.5 - Priority by Use	54
6.6 - Health and Safety Requirements.....	54
6.7 - Water Shortage Stages and Triggering Mechanisms	55
6.8 - Water Allotment Methods	57
6.9 - Potable Water Allocations by Priority and Shortage Stage.....	57
6.10 - Rate Structure Under Rationing	58
6.11 - Mandatory Prohibitions on Water Wasting	63
6.12 - Mechanism to Evaluate Effectiveness.....	63

Section 7 - Water Recycling

7.1 - Wastewater System Description.....	65
7.2 - Water Reuse Association Membership	65
7.3 - Wastewater Generation, Collection and Treatment.....	65
7.4 - Wastewater Disposal and Recycled Water Uses	66
7.5 - Encouraging Recycled Water Use.....	67
7.6 - Recycled Water Optimization Plan	67

List of Tables

1-1	Coordination and Public Involvement	2
2-1	Population Served by Water System	7
2-2	Annual Climate Information	8
3-1	Annual Production for the Mound Basin	13
3-2	Projected GMA Extraction Reductions	14
3-3	Santa Paula Groundwater Basin Production	15
3-4	Water Deliveries - Casitas	17
3-5	Water Production -Ventura River.....	18
3-6	Historic and Projected Water Source Supply Availability	21
3-7	2005-2010 CIP Project Schedule	24
3-8	Future Water Supply Projects.....	25
3-9	Water Quality TDS Secondary Standards	26
4-1	Historic Water Production and Population	28
4-2	Historical Water Consumption by User Group	29
4-3	Planning Area Population Projections	29
4-4	Projected Water Demand	30
4-5	Projected Water Consumption by User Groups.....	31
4-6	Summary of Projected Water Demand and Supply	32
5-1	FY 2005-2006 Water Rates	37
6-1	Supply Reliability and Demand Comparison	47
6-2	Summary of Projected Single Dry Water Year in 5 yr. Increments	48
6-3	Demand Comparison with Additional Water Supply	49

6-4	Summary of Projected Multiple Dry Water Years in 5 yr. Increments	50
6-5	Water Shortage Stages and Reduction Goals	51
6-6	Typical Health and Safety Water Per Capita Quantity Calculations.....	54
6-7	Water Supply Triggering Levels -Short Term.....	55
6-8	Impact of Water Sales Reductions Based on Conservation Stages	59
6-9	Water Sales and Meter Charge Revenue Impacts by Conservation Stages	60
6-10	Revenue Impact of Water Conservation	61
6-11	Water System Expenses	61
6-12	Overall Summary of Five Stage Water Shortage Plan.....	62
7-1	Wastewater Collected and Treated	66
7-2	Recycled Water Uses Projection	66
7-3	Projected Demands of Existing and Potential Near-Term Markets.....	68
7-4	Potential Long-Term Markets at Existing Effluent Quality.....	69

List of Figures

1-1	Vicinity Map	5
2-1	City of San Buenaventura Planning Area and Water District Boundary.....	10
2-2	Existing Major Water System Facilities.....	11
5-1	Water and Wastewater Rates	44

List of Appendices

A	GMA Ordinance	Fox Canyon Groundwater Management Agency (GMA) Ordinance No. 8; December 15, 2004 FCGMA Minutes
B	City Plan	Comprehensive Water Resources Management Plan
C	City Report	City of Ventura Water Consumer Confidence Report for 2005
D	City Ordinances	Water Waste Prohibition - Ord. No. 89-6; Water/Sewer Rates - Ord. No. 2005-005; Draft Principals and Guidelines for Emergency Water Ordinance.
E	City Resolutions	Resolutions adopting: 1983 Ventura County Conservation Management Plan (83-168), 1986 Urban Water Management Plan (86-170), 2000 Urban Water Management Plan (2001-20), 2005 Urban Water Management Plan (2005-098), and Landscaping Standards (91-49).
F.	City Admin. Report	Reclaimed Water System Expansion Policy

Section 1 - Agency Coordination

1.1 - Plan Adoption

This is the 2005 Urban Water Management Plan (UWMP) for the City of San Buenaventura (City). The plan has been prepared and will be submitted to the California Department of Water Resources in compliance with the California Urban Water Management Planning Act (UWMP Act, California Water Code, Division 6, Part 2.6), a California statute. The purpose of this plan is to evaluate the City's water supply, and water conservation program. An UWMP is required in order for a water supplier to be eligible for Department of Water Resources (DWR) administered state grants, loans and drought assistance. Water conservation and efficient use of California's water resources are becoming increasingly important, and the City has decided to continue development and implementation of water conservation measures appropriate for its service area.

The California Urban Water Management Planning Act, requires urban water purveyors providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 AF of water annually, to prepare and adopt an UWMP at least once every five years on or before December 31 in years ending in five and zero. The UWMP Act is designed to ensure that water utilities give careful consideration to their water resource needs and supplies, water conservation and other alternative water sources. The State of California Department of Water Resources (DWR) shall review all plans submitted and prepares a summary report, submitted to Legislature one year after UWMPs are due to the Department, detailing the status of and outstanding elements of the submitted reports.

1.2 - Public Participation

The UWMP Act requires water suppliers coordinate the preparation of its plan with other appropriate agencies in the area. This includes other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable. In addition, urban water agencies preparing plans are required to hold a public hearing on the UWMP prior to its adoption, and to file the adopted plan with the DWR. In response to these requirements, a public hearing was conducted on December 5, 2005 by the City to receive public comment and input on the UWMP. The final plan was adopted by the City Council on December 19, 2005, By Resolution No. 2005-098 (copy in Appendix E)

Table 1-1 summarizes the efforts the City has taken to include the various City departments, agencies and citizens in the preparation of this document.

Table 1-1

Coordination and Public Involvement

Entities	Helped Write the Plan	Was Contacted for Assistance	Was Sent a Copy of the Draft	Commented on the Draft	Attended Public Meetings	Was sent a Notice of Intention to Adopt
City Departments			X	X	X	
Fox Canon GMA			X	X		
Casitas MWD			X			
County Resource Mgmt. Agency			X			
General Public						
Other			X			

1.3 - Coordination within the City

Preparation of UWMP 2005 was coordinated by the City Utilities Division. Utilities division staff met with and coordinated the development of the UWMP with various City departments.

The City Council, biennially reviews the short and long term water supply-demand outlook for the City in a Biennial Water Supply Report. Adopted in October 2004, the 2004 Biennial Water Supply Report confirmed that based on the findings in the report and planned capital improvements, there is a sufficient water supply to satisfy the City's water needs for at least the next ten years. The City has adopted guidelines, which require that adequate water supply and wastewater treatment capacities are available before new development can be approved by the Community Development Department.

1.4 - Interagencies

Various agencies are involved in supplying water to the City or having jurisdiction over a portion of the water resources. This section briefly discusses each one.

Ventura County

State Department of Health Services, Ventura County Environmental Health and Public Health Services require prior contact before the City can issue a Water Quality Public Notification. The State Department of Health Services administers regulations that

protect public health and safety and help to ensure drinking water is pure, potable and wholesome. The County Environmental Health administers regulations affecting businesses that use drinking water for their customers. The Public Health Services monitor hospitals and medical clinics and stand ready to provide health advisory alerts to the community.

Casitas Municipal Water District (Casitas)

Casitas is a wholesaler of treated surface water from Lake Casitas to the City. The western portion of the City is within the Casitas service area and use of Casitas water is restricted to areas within its boundaries. Approximately 30 percent of the City's water accounts reside within the Casitas service area (see Figure 1-1). Currently the City purchases water from Casitas through an agreement that requires a minimum purchase of 6,000 acre-feet per year and up to 8,000 acre-feet per year.

United Water Conservation District (United)

United is primarily a groundwater recharger and a wholesale purveyor in central Ventura County. The eastern portion, approximately 70% of City's water accounts, is located within the United Water Conservation District service area (see Figure 1-1). United does not provide any water directly to the City. However, the City's three wells, located near the Buenaventura Golf Course, are within the United boundaries and are subject to United semiannual extraction fees.

The primary functions of United include:

1. Storage and management of storm water flows collected in Lake Piru.
2. Recharge of groundwater basins along the Santa Clara River.
3. Recharge of groundwater basins in the Oxnard Plain.
4. Wholesale delivery of groundwater to Oxnard, Port Hueneme Water Agency, and several mutual water companies for municipal and industrial use.
5. Delivery of surface water to the Pleasant Valley County Water District and to individual agricultural customers on the Oxnard Plain.

Fox Canyon Groundwater Management Agency (GMA)

The Fox GMA was created by state legislation in 1982 to manage local groundwater basins and resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the Fox Canyon GMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate the basin at a safe yield. In August 1990, the Fox Canyon GMA passed Ordinance No. 5, which requires existing groundwater users to reduce their future well water extractions by five percent every five years until a 25 percent reduction is reached by the year 2010.

The City's three existing potable Golf Course Wells pump from the Fox Canyon Aquifer, which are regulated by the Fox Canyon GMA and United. Golf Course Wells 5 & 6 are active and Golf Course Well 3 is currently inactive. A fourth, Golf Course Well #2 is used as a backup well to irrigate the City's Buenaventura Golf Course. Currently, the Golf Course is irrigated by reclaimed water. Golf Course Well 2, also pumps from the Fox Canyon Aquifer and is regulated by the Fox Canyon GMA and United.

1.5 - Water Shortage Emergency Response

The City has developed two plans to mitigate short-term water supply shortages. These plans are the "City of San Buenaventura Emergency Plan" and "Principles and Guidelines for Emergency Water Ordinance." The "City of San Buenaventura Emergency Plan" is a comprehensive plan of action developed conjunctively by various City departments for coordination of emergency services in the event of a disaster. The Emergency Plan is comprised of two parts, the "Basic Plan" and the "Annexes."

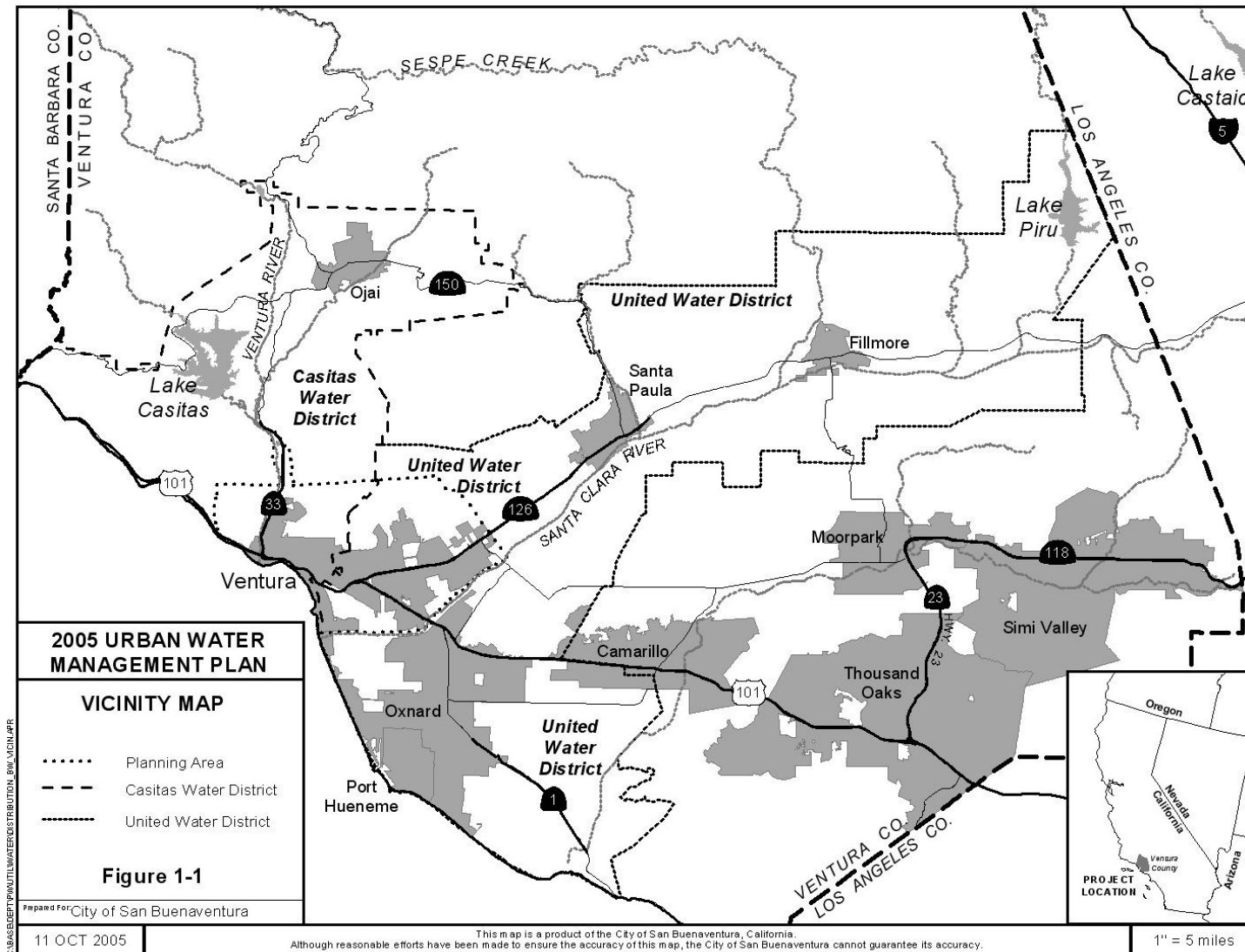
The Basic Plan addresses planned response to extraordinary emergency situations associated with natural disasters, technological incidents and war operations. It provides operational concepts relating to various emergency situations, identified components of the Local Emergency Management Organization, and describes the overall responsibilities of the City for protection of life and property and assuring the overall well-being of the population. The plan also identifies the sources of outside support which might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

The Annexes establish policies and procedures and assigns responsibilities to ensure the effective management of emergency operations during peacetime and emergency situations. It provides information on the dissemination of emergency public information, emergency communications, alerting and warning procedures, and damage assessment and reporting. The annexes describe the organizational and operational concepts for managing emergency operations. The "Principles and Guidelines for Emergency Water Ordinance" is a draft ordinance developed by the City Water Division to mitigate the loss of potable water supply due to natural or manmade disasters. The enabling ordinance requires action by the City Council in the event of an emergency and provides the City Council and City Manager with appropriate guidelines to maintain an equitable distribution of water. Two levels of disaster are identified:

Level 1 being short-term loss or unreliability of water supply due to disaster or catastrophe caused by an unforeseen natural or manmade event.

Level 2 being long-term loss of supply due to conditions resulting over an extended period of time.

Priorities of water usage are identified by user classification dependent upon the severity of disaster, and provisions are outlined for immediate implementation to mitigate the shortage. The draft ordinance is included in Appendix D of the UWMP.



Section 2 - Contents of Plan

City of San Buenaventura - History and Water Facilities

2.1 - History, Growth, and Other Demographic Factors

The City developed as a result of the ninth and last mission founded in California by Father Junipero Serra in 1782. In 1866, the City incorporated an area of about one square mile around the original Mission San Buenaventura. Since that time, the City has grown to an estimated 21 square miles. An estimated population of 109,812 is currently supplied water from the City's water system. This includes several unincorporated County areas, such as the Canada Larga area on the northwest and developing areas northeast of the City boundaries. The City is located 62 miles north of Los Angeles and 30 miles south of Santa Barbara along the California coastline.

The City Charter provides for a Council-Manager form of government. A seven member Council is elected at large for four-year terms, with the Mayor selected by the Council for a two-year term.

The Spanish Fathers for the Mission San Buenaventura developed the first water system for the City. It consisted of an aqueduct (that is now abandoned) to convey water from the Ventura River, near San Antonio Creek, to a reservoir located behind the Mission. During subsequent development around the Mission, additional groundwater was obtained from wells in the Ventura and Santa Clara River basins. Water facilities were developed and operated for the City by several individuals and companies over the period of 1869 to 1923. In 1923, the City acquired the water system from the Southern California Edison Company and assumed the responsibility of providing water to City residents. In years following, the City developed additional sources of surface and groundwater, including wells and improvements to the surface water diversion from the Ventura River. Also, since 1960, the City has purchased surface water from Casitas Municipal Water District to supplement its water supplies. As the City expands toward the east, additional groundwater sources have been developed to meet increasing demands.

Table 2-I shows the estimated population history for the City. Population estimates were taken from the California Department of Finance (Table 2:E-4) and adjusted to include some unincorporated county areas served by the City's water system from 1990 forward. Future population projections for the City reflect a 0.88% annual growth rate, which is equivalent to the annual growth over the past 10 years. In addition, future population for the unincorporated areas served by the City's water system is based on an average customer count, over the past five years, which reflects a growth rate of 0.35%.

Table 2-1

Population Served by Water System

Year	Population
1940	13,264
1950	16,534
1960	29,114
1970	57,964
1980	74,393
1990	94,856
2000	103,238
2001	104,153
2002	105,267
2003	106,782
2004	109,002
Projections	
2005	109,812
2010	114,629
2015	119,659
2020	124,913
2025	130,400

2.2 - Climate

San Buenaventura has a climate that is similar to a Mediterranean coastal city. That is, the winters are cool, and the summers are warm and mild. The average temperature range is in the 70's and it is uncommon that the temperature drops below freezing. The area has an average rainfall of approximately 15 inches. However, the current rain year has recorded 33.83 inches of rain. This is the fourth wettest year on record for Ventura and is not reflective of our normal rainfall. During the summer months, a layer of fog is usually present over the City and this results in a general decrease of water consumption. Table 2-2 shows the average annual climate information by month.

Table 2-2

Annual Climate Information

Month	Standard Monthly Avg. ETo ¹	Average Rainfall ²	Average Temperature ³
Jan	1.83	3.43	65.4
Feb	2.20	3.34	66.3
Mar	3.42	2.74	66.2
Apr	4.49	0.91	67.8
May	5.25	0.28	68.8
Jun	5.67	0.06	71.2
Jul	5.86	0.01	74.0
Aug	5.61	0.02	75.0
Sep	4.49	0.22	75.1
Oct	3.42	0.50	74.1
Nov	2.36	1.40	70.5
Dec	1.83	2.54	66.6
Annual Average	46.43	15.45	70.1

Notes:

¹ Avg. ETo (evapotranspiration) figures are from the California Irrigation Management Information System's Web site

<http://www.cimis.water.ca/gov/cimis/monthlyEToReport>.

² The average rainfall data is from Ventura County Watershed Protection District's web site for station 66 www.countyofventura.org

³ The average temperature figures are from the Western Regional Climate Center web site www.wrcc.dri.edu

2.3 - Water Treatment, Distribution Facilities and Service Area

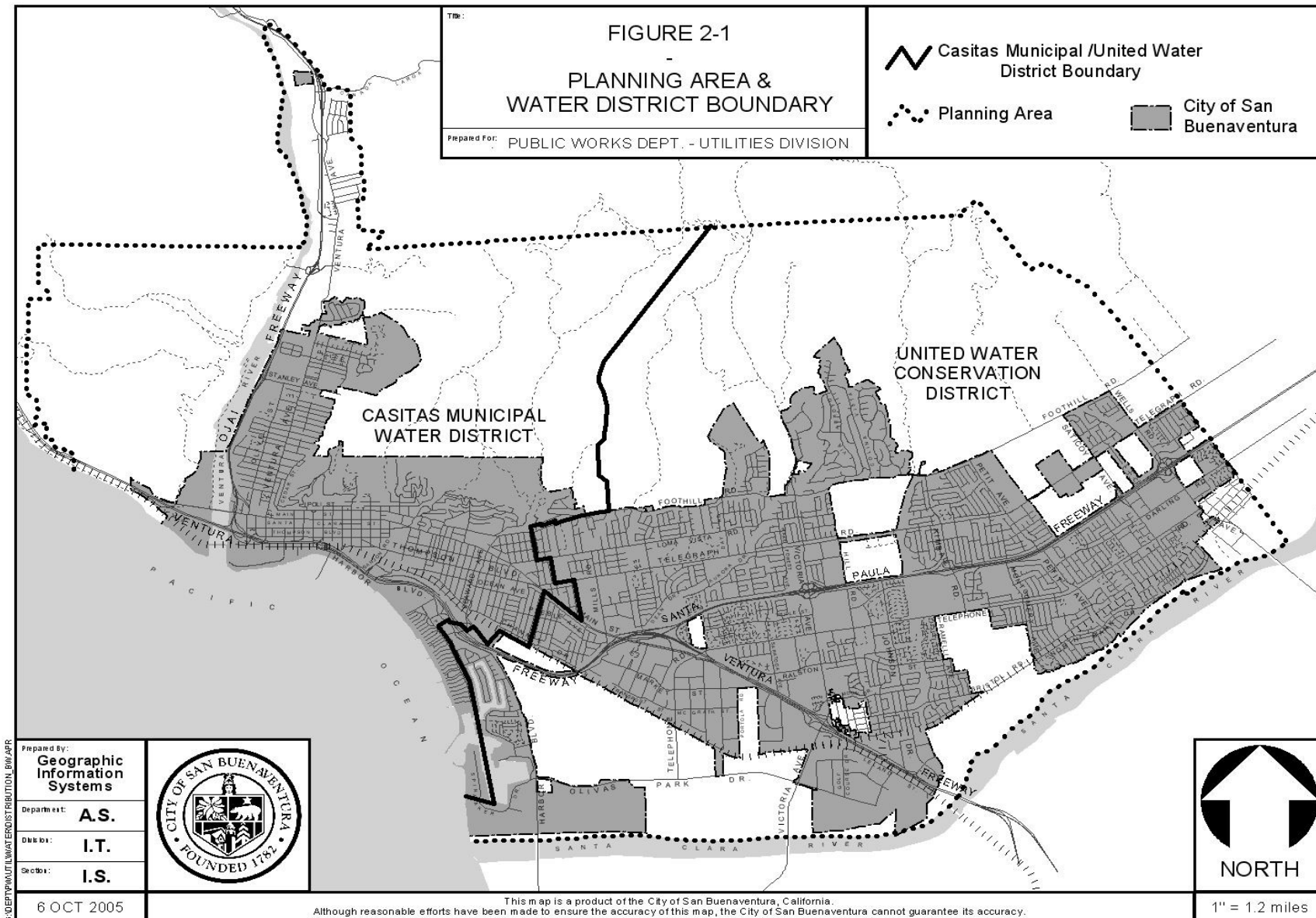
Currently, the City's water system serves approximately 31,000 water service connections, which includes the population of the City plus some additional areas outside the City boundaries (see Figure 2-1). The western portion of the City is within the Casitas Municipal Water District service area. The eastern portion of the City is within United Water Conservation District's boundaries. Water service is provided to all residential, commercial, industrial and agricultural customers; including fire protection users.

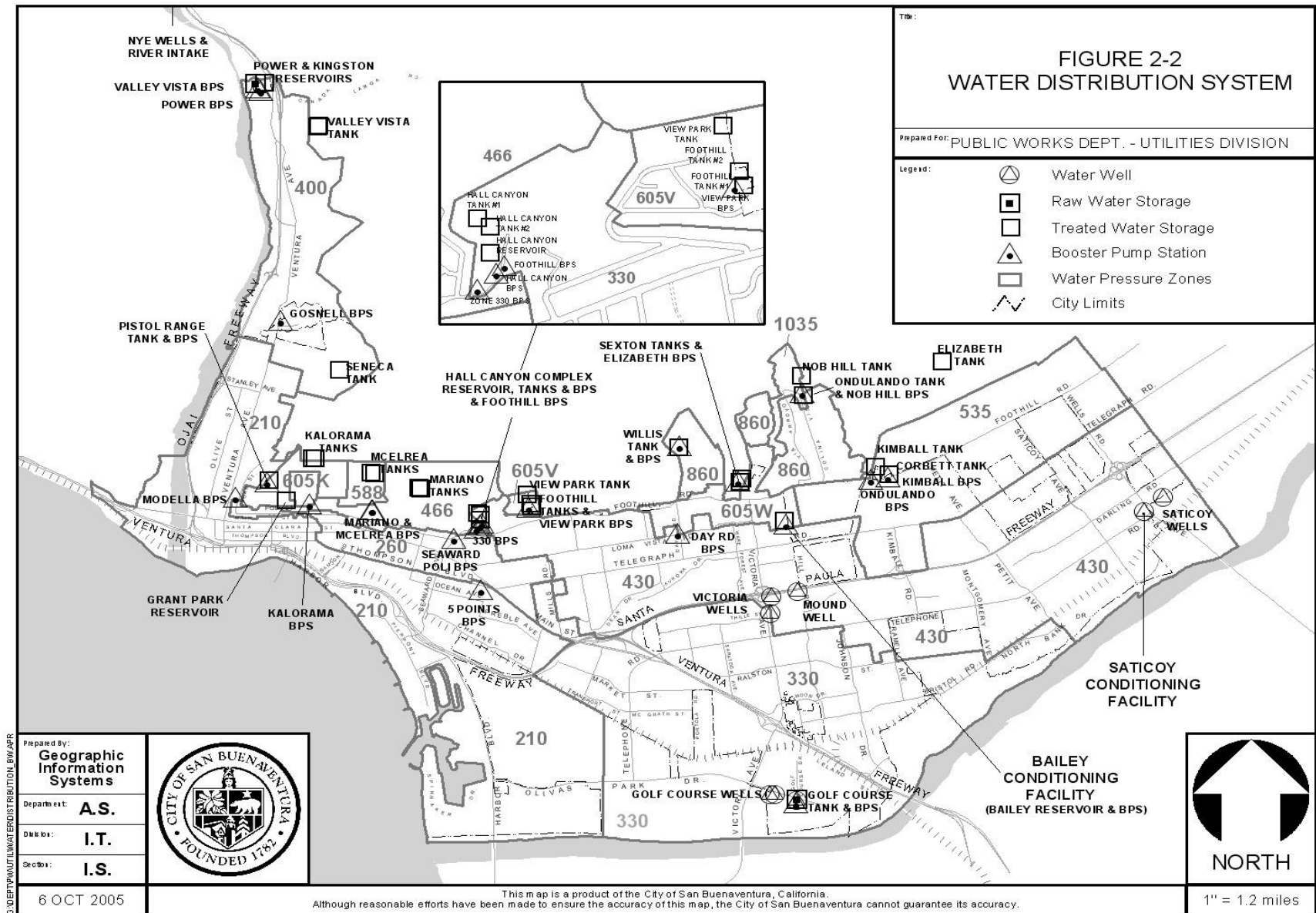
The Ventura River on the west, Foster Park on the north, Franklin Barranca and the Santa Clara River to the east, and the Pacific Ocean as the southern boundary, bound the City's planning area. The total planning area encompasses approximately 40

square miles. The water service area also includes the Saticoy Country Club (SCC) (66 residences with tennis and country club facilities) located east of the City. They have their own stand-alone system, which includes (2) wells, (1) booster pump station and (2) storage tanks. The responsibilities are shared between the City and the Country Club. The SCC system has a separate Water Supply Permit from the State Department of Health Services.

The City water system is a complex system of 14 pressure zones, 13 wells, 22 booster stations, approximately 500 miles of pipelines ranging from 4-inches to 36-inches in diameter, and a total storage capacity of approximately 48 million gallons in 33 tanks and reservoirs. The system delivers water from sea level to a maximum elevation of over 1,000 feet. The City operates three purification facilities, including one conventional filtration treatment plant for surface water sources on the westside of the City, and two iron/manganese removal treatment plants for groundwater sources on the eastside. Refer to Figure 2-2 for locations of major water facilities.

The City also maintains and operates the Ventura Water Reclamation Facility. See Section 7 for further description.





Section 3 - Past, Current, and Projected Water Supply

The City receives its water supply from local groundwater basins, sub-surface water from the Ventura River and Lake Casitas.

There are presently five water sources that provide water to the City water system, with a new water source (located at Ventura County Yard), expected to be online by 2007.

- Casitas Municipal Water District (Casitas)
- Ventura River Surface Water Intake, Subsurface Water and Wells (Foster Park)
- Mound Groundwater Basin
- Oxnard Plain Groundwater Basin (Fox Canyon Aquifer)
- Santa Paula Groundwater Basin

The City also provides reclaimed water from the Ventura Water Reclamation Facility.

3.1 - Ground Water

Mound Groundwater Basin

Currently, two wells supply water from the Mound Groundwater Basin. Victoria Well No. 2, which was installed in 1995 and Mound Well No. 1, which began production in April 2003. Victoria Well No. 1, which was installed in 1982, is considered an inactive well at this time due to maintenance and water quality issues. Projected capital improvement projects for the Mound Basin include a new well and an upgrade to Victoria Well #2. A new well, Mound Well #2, is planned for the Mound Basin in the year 2010. The well design will be similar to Victoria Well No. 2 and is anticipated to have a capacity of approximately 2,500 to 3,000 gpm. In the future Victoria Well No. 2 will receive new electrical equipment to insure production reliability.

In March 1996 the City completed a project that included: 1) constructing Mound Basin monitoring wells at Camino Real Park and Marina Park; 2) developing a database from historical records, and 3) identifying potential surpluses within the basin. This project was performed in conjunction with the United Water Conservation District. A report compiled as part of that project indicated that historical data supports a basin yield of at least 8,000 AFY during drought conditions as long as pumpage is reduced during wet years to allow water levels to recover. It is anticipated that the basin will be able to sustain a higher yield (at least 10,000 AF during drought periods), provided that future wells are located so as not to adversely impact the existing Mound Basin Wells.

For this report, using data from Victoria Well No. 2 and Mound Well No. 1, the future water supply from the Mound Basin is assumed to be 5,700 AFY based on 75 percent of the current pumping capacity of 7,600 AFY. A ten-year historic annual production for the Mound Basin is listed in Table 3-1.

Table 3-1

Annual Production for the Mound Basin

Year	Production (AF)
1995	2,169
1996	2,789
1997	213
1998	802
1999	3,954
2000	4,579
2001	4,030
2002	3,721
2003	5,546
2004	4,773

Notes:

1. Figures are from City water production records.
2. Well production for 1997 and 1998 was reduced as more water was taken from Lake Casitas because of the City's Minimum Purchase Agreement, and Victoria Wells were off due to the Bailey Plant expansion.

Oxnard Plain Groundwater Basin

Wells near the Buenaventura Golf Course have drawn from the Oxnard Plain Groundwater Basin since 1961. Currently, two wells produce potable water for the City's system with a third well out of service for rehabilitation. This third well is used as an emergency source and will only return to service during a drought. These wells pump from the Fox Canyon aquifer of the Oxnard Plain Groundwater Basin. Average annual yield from the golf course wells over the past 10 years has been about 2,500 AFY.

The Fox Canyon Groundwater Management Agency (GMA) was created by state legislation in 1982 to manage local groundwater resources in a manner to reduce overdraft of the Oxnard Plain and stop seawater intrusion. A major goal of the GMA is to regulate and reduce future extractions of groundwater from the Oxnard Plain aquifers, in order to operate and restore the basin to a safe yield. In August 1990, the GMA passed Ordinance No. 5, which requires existing groundwater users to reduce their future well water extractions by five percent every five years until a 25 percent reduction is reached by the year 2010. Long-term production will be about 4,100 AF per year. The GMA's groundwater management plan and additional information is located at www.countyofventura.org/dept under Public Works Agency. Appendix A reflects the latest GMA Ordinance (No. 8).

The City's baseline allocation was set by the GMA at 5,459 AFY, which was the average extraction from the Golf Course Wells for the period 1985 to 1989. Beginning in 1992, baseline extractions set by the GMA will be reduced in five percent increments until a 25 percent reduction is achieved in 2010 by all users. It is assumed by the GMA that the 25 percent reduction and improved irrigation efficiencies by agriculture will reduce consumption to meet basin safe yield. The City's supply from this source under this plan is shown in Table 3-2.

Table 3-2

City of San Buenaventura
Projected GMA Extraction Reductions

Year	Percent of Baseline	Allowed Extraction (AFY)
Baseline		Actual
Prior to 1992	100	5,459
1992 - 1994	95	5,186
1995 - 1999	90	4,913
2000 - 2005	85	4,640
2006 - 2009	80	4,367
2010 - 2040	75	4,094

Notes:

1. Baseline allocation is the average of Golf Course Well extractions from 1985 through 1989.
2. On December 15, 2004 the Fox Canyon GMA Board delayed the 5% cutback for CY 2005 by one year. CY 2005 extraction will remain the same as CY 2004. (Appendix A)

Following wet weather conditions, water levels in the City's groundwater basins rise significantly. Reduced water demands reflect a reduction in well production than their assigned historical allocation, which has allowed the City to accumulate 35,447 AF credits in the GMA bank as of December 31, 2004. This storage bank makes it possible for the City to implement operational procedures that will allow the use of its groundwater supplies up to safe yield levels, and to use its banked groundwater credits as an additional supply in the event of a drought. If the City were to use its banked water, it is estimated that the City could extract as much as 5,600 AFY based on 75% of the current pumping capacity of 7,500 AFY. However, for this report, future supply is conservatively based on GMA restricted extraction limits listed in Table 3-2.

Santa Paula Groundwater Basin

The Saticoy Water System acquired by the City in 1968 included Saticoy Well No. 1, which draws from the Santa Paula Basin. Due to casing failure, the well was destroyed and replaced in 1991 with a new well designated as Saticoy Well No. 2. This was placed in the same general location. In May 2003 Saticoy Well No. 2 was rehabilitated. The well capacity was reduced to 1,800 gpm. The original well construction was incapable of pumping properly at higher flows. Pumping capacity within the Santa Paula Basin is currently 2,200 AFY based on 75% of the current pumping capacity of 2,900 AFY. However, projected 2005 year-end actuals reflect 91% (2,600 AFY) of pumping capacity. Water from Saticoy Well No. 2 is treated by an iron/manganese conditioning facility.

Recent production in the Santa Paula Groundwater Basin has been:

Table 3-3

Santa Paula Groundwater Basin - Production

Year	Production (AF)
1995	2,594
1996	1,599
1997	2,025
1998	1,033
1999	1,669
2000	1,698
2001	2,006
2002	1,157
2003	316
2004	2,183

The City is moving forward with constructing Saticoy Well No. 3 (completion anticipated 2007), which will improve the water supply to the Saticoy Treatment Plant. It is expected that Saticoy Well No. 3 will have a pumping capacity of 3,000 AFY based on 75% of the planned pumping capacity of 4,000 AFY. Total pumping capacity within the basin is anticipated to reach 5,200 AFY, based on 75% of pumping capacity, by 2007.

In March 1996, the City ended a five-year stalemate over the future use of the Santa Paula Basin. Under an agreement with the United Water Conservation District and the Santa Paula Pumpers Association (an association of ranchers and businesses), the City can pump on average 3,000 AFY from the Santa Paula Basin. The City is not limited to this allocation in any single year, but may produce seven times its average annual allocation (21,000 AF) over any running seven-year period. In addition, the City may pump an additional 3,000 AFY in case of an emergency resulting from a long-term drought situation.

There are plans to expand the Saticoy Conditioning Facility's capacity in 2008 allowing two wells to run together at the same time. The higher output will provide additional supply to the 430-pressure zone, where demand may increase due to proposed development.

For purposes of this plan, the future annual production (2010 forward) from the Saticoy Wellfield is estimated to be 3,000 AFY, which is about 75 percent of the maximum design pump capacity (2,500 gpm) for one well.

Saticoy County Yard Well

The County of Ventura has relocated their maintenance yard to a site within the Saticoy Community contiguous to the City's water service area. In exchange for extraterritorial water service, the County has provided the City a well to offset their water demand. The well is expected to provide not only production capacity for serving the maintenance yard, but also significant additional system capacity. This well will pump from the United Forebay Basin. This additional supply will be used to offset the loss of production capacity that occurs from the Ventura River supply during dry weather and emergency conditions. The Saticoy County Yard Well is anticipated to begin production in 2007, with an estimated 75 percent of design production capacity of 2,400 AFY. The water demand for the maintenance yard is estimated to be 20 AFY.

3.2 - Local Surface Water

Casitas Municipal Water District (Casitas)

The western portion of the City is within Casitas' service area (see Figure 1-1). Approximately 30 percent of the City's water accounts are located within the Casitas service area. The City currently purchases water from Casitas (see Table 3-4 for historical water deliveries). Casitas delivers water to its customers from Lake Casitas located approximately 10 miles northwest of the City, which stores storm water runoff from local watersheds. Casitas supplies potable water to agricultural, domestic, municipal, and industrial users within its service area. The Casitas service area includes the Ojai Valley, the western part of the City, and the coastal area between the City and Santa Barbara County. Use of Casitas water is restricted to areas within its boundaries.

The "safe yield" of Lake Casitas is defined to be the amount of water that can be removed from the lake each year without excessive risk that the lake will become dry. The safe yield of Lake Casitas based on a December 7, 2004 updated study, is now 19,780 AFY during a 15 year drought recovery period and 20,840 during a 21 year drought period.

To maintain the future operation of Lake Casitas at safe yield, Casitas has established an allocation program for its customers in 1992. The City's allocation can be as high as the in-District demand for Stage I (wet or average year), or reduced to 7,090 AFY for

Stage 2 (dry conditions) and further incrementally reduced (stages 3 and 4) to 4,960 AFY for Stage 5 (extremely dry conditions). Stage 2 is initiated when Lake Casitas storage drops below 95,000 AF and Stage 5 when levels drop below 65,000 AF. The lower allocation remains in effect until the storage is recovered to 90,000 AF. Total lake storage as of August 2005 was 242,600 AF. A possible future impact to the multistage allocation system may be the operation of the fish ladder at the Robles Diversion. This may limit the amount of water available to the City.

In July 1995, the City signed an agreement with Casitas establishing the City's minimum annual purchase at 6,000 acre-feet per year (AFY), which is subject to the allocation program described above during drought periods. For this report the projected water supply available, for in-district use, from Casitas is anticipated to be 8,000 AFY.

Table 3-4 reflects historical water purchases from Casitas.

Table 3-4

Water Deliveries - Casitas

Year	Deliveries (AF)
1995	1,622
1996	4,456
1997	7,089
1998	4,328
1999	7,061
2000	5,836
2001	6,292
2002	7,127
2003	4,912
2004	6,833

Ventura River

Surface water from the Ventura River is diverted through the City's Foster Park facilities. The surface diversion, subsurface intake, and four shallow wells within the Ventura River collect water. Production from this source is a function of several factors including diversion capacity, local hydrology, environmental impacts, and the storage capacity of the Ventura River alluvium and upstream diversions. Table 3-5 reflects the recent production from this water source.

Table 3-5

Water Production - Ventura River

Year	Production (AF)
1995	9,042
1996	7,926
1997	7,052
1998	8,069
1999	6,419
2000	6,779
2001	5,727
2002	5,951
2003	6,722
2004	6,118

The Ventura River water source is very dependent upon local hydrology. Currently, the Surface Diversion at Foster Park is unused due to the natural channeling of the active river channel. Each year the flows change the position of the active river channel in relation to the intake structure. According to a model of the Ventura River developed in 1984 and modified in 1992, the Ventura River Basin fills after one or more years of above average rainfall. Once full, it takes three successive years of drought, with below average rainfall to deplete the river basin subsurface storage and cause river water production to drop until the drought ends.

The Nye Wells in the Ventura River produce water throughout the year. However, due to storm flows the wells are subject to inundation and erosion. Recently, the 2005 winter storms destroyed Nye Well 1A and damaged Nye Well 2, 8, and 7. These wells are currently in repair but it is anticipated that they will be back in full operation by the summer of 2006. For this report a calendar year 2005 estimate of 2,400 A/F will reflect the annual water supply for Ventura River.

The City's current Capital Improvement Project CIP# 73022 - Foster Park Wellfield may allow replacing the production capacity of the surface diversion with three new wells (Nye Well #10, 411, and #12). CIP# 73009 Ave. Water Treatment Plant/Foster Park Phase 2 may add two additional wells (Nye Well #9 and #13). As part of this development, a reevaluation of the environmental impact report is anticipated along with an update to the City's Water System Master Plan in FY 2005-2006. This reevaluation will identify the exact number of wells and where the wells will be placed; along with production and cost estimates. Construction could begin as early as FY 2007-2008.

It is stated in the "Comprehensive Water Resources Management Plan, December, 1994," (copy in Appendix B) that the yearly yield is between 700 and 11,000 AF per year. For this report the average long-term water production of 6,700 AFY will be used,

in future years, and is based on the Evaluation of Long Term Alternative Water Sources, James M. Montgomery, June 1993 and our current water production facilities.

3.3 - Imported Water

State Water Project (SWP)

In 1964, Ventura County Flood Control District contracted with the State of California for future delivery of up to 20,000 AFY of SWP water to Ventura County. In 1971, administration of the contract for SWP water was assigned to Casitas. The City executed an agreement in 1971 with Casitas and the Department of Water Resources (DWR) to allocate 10,000 AFY of the entitlement to the City. This obligation extends to the year 2038. In the contract with Casitas, the City retains full authority and responsibility for advance scheduling of their state water and for determining the point and method of delivery. To date, the City has not received delivery of its allotment, and it is not certain if or when facilities will be constructed to transport SWP water to the City. In 1998 the City became a signatory to the SWP Monterey Amendment. The Monterey Amendment would allow the City, with other contractors to sell surplus water back to the state; however, litigation has prevented the terms of the amendment from being fully acted upon.

The City, Casitas, and United (referred to as the Joint Agencies) pay annual entitlement fees to DWR, which cover construction costs for SWP facilities and administration to deliver allotments of water throughout the state. In addition, the citizens of Ventura voted November 3, 1993 in favor of desalinating seawater over importing water through the SWP, as the preferred supplemental water supply option. However, based on the City Attorney's review of the City's entitlement, the City cannot unilaterally end its involvement in the SWP's financial obligations and entitlement without great risk. There are two options that exist for the City with respect to its SWP entitlement: solicit other Ventura County agencies to accept the City's financial obligations for its entitlement, or maintain the SWP entitlement pending future decisions on water supply. Per the 1994 Comprehensive Water Resources Management Plan (see Appendix B):

“At this time, the potential future benefit of using the SWP entitlement for the City's advantage outweighs the cost and risk of abandoning the City's investment in this option. The decision concerning the ultimate disposition of the City's SWP entitlement would be more appropriately made when the need for a supplemental water supply is imminent. Since the City will not need a supplemental water supply for at least 15 years, using the entitlement on a short-term basis to either improve the City's water supply conditions or minimize the financial impact of keeping the entitlement should be pursued. Beneficial uses or alternatives for the City's SWP entitlement may be found prior to the decision on how this source is or is not incorporated into the City's long-term supplemental water supply.”

3.4 - Recycled Water

The City also operates the Ventura Water Reclamation Facility (VWRF) with secondary capacity to 14-million gallons per day (MGD). The tertiary-level treatment plant produces an effluent that meets the requirements of Title 22 of the California Administrative Code. The plant capacity is approximately 10.5 MGD due to increased regulatory demands (see Sec. 7-3). The City utilizes recycled water from its reclamation facility to augment the water supply. Recycled water is used to irrigate City and private landscaping in the area and the Buenaventura and Olivas Park municipal golf courses. The remaining treated effluent is discharged to the Santa Clara River Estuary. The City's reclaimed water system consists of five miles of pipelines and two pumping facilities.

3.5 - Water Source Supply Summary

Table 3-6 summarizes historic and projected water supply (non-drought conditions) from the City's water sources. The projected figures are based on the water supply available from each source and do not necessarily represent amounts currently produced. It should be noted that historical delivery figures are well below the capacity of the available sources, however, actual future water supply levels in any given year may be significantly higher or lower than average.

Table 3-6
Historic and Projected Water Source Supply Availability (Acre Feet) ⁽¹⁾

Year	Surface Water		Groundwater				Total Water Supply
	Lake Casitas ⁽²⁾	Ventura River ⁽³⁾	Mound Basin ⁽⁴⁾	Oxnard Plain Basin ⁽⁵⁾	Santa Paula Basin ⁽⁶⁾	Saticoy County Yard Well ⁽⁷⁾	
1980	7,544	7,276	0	5,198	2,129		22,147
1985	9,099	5,493	2,360	6,172	46		23,170
1990	6,175	2,859	4,365	5,749	0		19,148
1995	1,622	9,042	2,169	2,603	2,594		18,030
2000	5,836	6,779	4,579	2,674	1,698		21,566
2001	6,292	5,727	4,030	905	2,006		18,960
2002	7,127	5,951	3,721	1,978	1,157		19,934
2003	4,912	6,722	5,546	2,898	316		20,394
2004	6,833	6,118	4,773	2,391	2,183		22,298
2005	8,000	2,400	5,700	4,600	2,600		23,300
2010	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2015	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2020	8,000	6,700	5,700	4,100	3,000	2,400	29,900
2025	8,000	6,700	5,700	4,100	3,000	2,400	29,900

Notes:

¹ Includes treated and raw water; excludes reclaimed water supply.

² Lake Casitas is the City's total past supply including raw water and oil users; projected supply is the City's anticipated water availability for In-district use.

³ Ventura River future supply is the average long-term production per the Evaluation of Long Term Alternative Water Sources, James M. Montgomery, June 1993. Reduced value in 2005 reflect lost and damaged wells caused by 2005 storm.

⁴ Mound Basin future supply is 75 percent of well pump capacity within basin.

⁵ Oxnard Plain Basin future supply is based on GMA restricted extraction limits (rounded to nearest 100 AF from Table 3-2).

⁶ Santa Paula Basin 2005 water supply reflects estimated year-end actuals. Future production reflects 75% of maximum design capacity for one well at 2500 gpm.

⁷ Saticoy County Yard Well is 75% of well pump capacity.

3.6 - Supplemental Water Supplies

Recently, the City has entered into a contract with RBF Consultants to update the City's Water System Master Plan during Fiscal Year 2005 - 2006. This update along with the City's current Capital Improvement Projects (CIP) will identify improvements needed to increase production capacity and storage, improve our ability to move water from the diverse sources of supply to all points of use, maintain water quality at its current level, reliability and safety. The City continues to implement improvements to the water system and update the five year CIP plan, which is essential to meet future water production, storage and transport needs in non-drought and drought conditions. The Capital Improvement Projects and their anticipated completion dates are identified on Table 3-7. Future water supply projects are further identified on Table 3-8.

As mentioned earlier the City's State Water Entitlement is a long-term water supply option. In addition, the preferred supplemental supply option is seawater desalination. On November 3, 1993 the citizens of Ventura voted in favor of desalinating seawater over importing water through the SWP. The City hired an engineering consultant to evaluate the technical, economic and environmental feasibility of building a desalination plant. Per the 1994 Comprehensive Water Resources Management Plan (Appendix B), it was concluded that the City will not need an additional water supply source for the next approximately fifteen (15) years. Therefore, there is no technical benefit at this time for the City to make a decision as to long term additional water supply options based on current circumstances. However, with the update of the City's Water System Master Plan, long-term water supply options will be reevaluated. In the short-term, should there be a significant drought, the analysis in Section 6.3 indicates that the use of banked water in the Fox Canyon Aquifer, along with water conservation, and implementation of the above CIP projects should enable the City to meet its current and anticipated demands.

3.7 - Water Quality

Ventura's Primary Drinking Water Standards (PDWS) continues to meet or exceed state and federal standards. Whether the water source is from the Ventura River, Casitas or groundwater basins all Ventura water customers receive treated water. As stated in the 2005 Water Consumer Confidence Report, the City continues to monitor water quality along the Ventura River and San Antonio Creek at 15 sites for Cryptosporidium, Giardia, Bacteria, Nutrients, Bromide, Total Organic Carbon, Chloride and Conductivity. The City will update a Sanitary Survey of the Ventura River Lower Watershed in 2006. In addition, the City will continue to conduct tests to optimize its treatment with corrosion inhibitors in an effort to further reduce lead and copper with respect to meeting EPA standards and evaluating Public Health Goals every three years.

The City's water sources enter the distribution system at various points throughout the City. Therefore, the quality of delivered water is different throughout the City. The City's secondary standard water quality goal is to reach an average total dissolved solids (TDS) concentration of 800 mg/l. TDS is a parameter used to characterize the

water quality hardness. Secondary drinking water standards are defined for TDS as aesthetics that impact the quality of the water such as appearance, odor, and taste. Table 3-9 reflects the secondary standard MCL by water source over the past five years. The City's west end receives better quality water from Lake Casitas and the Ventura River than from the eastside wells. To satisfy the TDS water quality goals established by the City Council in the Comprehensive Water Resources Management Plan Update, additional westside water supplies or treatment of eastside sources would be required. A summary of Ventura's water quality is identified in the Water Consumer Confidence Report for 2005 and is enclosed as Appendix C.

Table 3-7
2005-2010 CIP Project Schedule

Program #	Project Description	Fiscal Year 2004-05	Fiscal Year 2005-06	Fiscal Year 2006-07	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10
	WATER FACILITY PROJECTS						
73009	Avenue WTP/Foster Park Phase 2						
73013	Bailey Control and Equipment Upgrade						
73015	Victoria Well #2 Upgrade						
73018	Golf Course Well #7						
73020	Mound Well #2						
73022	Foster Park Wellfield						
97521	Saticoy Conditioning Facility Renovation						
97850	Avenue Water Treatment Plant						
97879	New Tank-Arroyo Verde (605 Zone)						
97887	Booster Pump Station Upgrades						
97891	Chlorination/Chloramination Modifications						
97896	Golf Course BPS & Wells Upgrade						
97898	Booster Pump Station Fixed Emergency Power						
97899	Saticoy Well #3						
	WATERLINE PROJECTS						
73004	Grant Park Water System Improvements						
73016	Water Distribution Pressure Stations						
73917	Downtown Water Main Replacement						
73019	Market Street Area Waterline Replacement						
73023	Waterline - Olivas East of Harbor Blvd.						
97841	430 Water Pressure Zone Reservoir and Pipeline						
97864	Waterline - Loma Vista 210/430 Tie-In (3 lines)						
97867	Waterline Replacement Foster/Hillside 466/360R						
97868	Downtown Hillside Waterline Replacement						
97870	Seaward Avenue / 101 Waterline						
97878	Waterline Replacement Ondulando Area						
97884	Waterline Replacement Poli Street						
97889	Waterline - Harbor Blvd.						
97890	Waterline Replacement Montalvo Area						
97893	Waterline-Northbank (West)						
97894	Waterline-Northbank (East)						
97895	Waterline Extension-Telephone (210/330)						
97897	Dead-End Water Main Connections						

Table 3-8

Future Water Supply Projects

Program #	Water Supply Projects	Projected Start Date	Projected End Date	Normal-Year AF Supply	Single-Dry ¹ Year Yield AF	Multiple Dry ² Year 1 AF	Multiple Dry ³ Year 2 AF	Multiple Dry ⁴ Year 3 AF
97899	Saticoy Well #3	FY 2004-05	FY 2006-07	3,000	2,250	2,250	1,125	844
	Saticoy County Yard Well	FY 2004-05	FY 2006-07	2,400	1,800	1,800	900	675
TOTAL A/F				5,400	4,050	4,050	2,025	1,519

Notes:

¹ Single Dry Year is estimated at 75% of Normal Year² Year 1 is estimated at 75% of Normal Year³ Year 2 is 50% of Year 1⁴ Year 3 is 75% of Year 2

Project Description:

97899	Saticoy Well #3	This new well and transmission main will provide backup, redundancy and drought proof capabilities to the water system. This well will have a capacity of approximately 2,500 gpm.
	Saticoy County Yard Well	This new well is located in the County of Ventura's maintenance yard within the Saticoy Community. In exchange for extraterritorial water service the County has provided this well to the City. This well shall service the County maintenance yard and provide additional system capacity.

Table 3-9

Water Quality - Secondary Standards
Total Dissolved Solids

Water Source	SMCL Goal	2000	2001	2002	2003	2004	5 Year Average
Lake Casitas	1,000	340	370	340	330	350	346
Groundwater	1,000	1,090	1,133	1,167	1,202	1,242	1,167
Ventura River	1,000	522	498	551	597	548	543

Note: Secondary Maximum Contaminant Level (SMCL) or the highest level of a contaminant that is allowed in drinking water. Secondary MCLs for TDS are set to protect odor, taste and appearance of drinking water.

Section 4 - Past, Current, and Projected Water Use

4.1 - Water Demand

Historic Water Demand

The City's water system provides water to residential, commercial, industrial, petroleum recovery, irrigation, and municipal users. Raw water usage is injected into the ground for oil recovery and used by agriculture customers. All other customers receive treated potable water.

Table 4-1 shows historical water production, consumption, and population trends within the City. Water production is the total amount of water supplied to the water system from the City's various water sources. Water consumption is the water actually used by City water customers. Any difference between production and consumption is known as unaccounted system loss. These losses could be from slow running meters, pipe leakage, fire hydrant testing, etc.

Water consumption within the City (excluding raw water/oil company use) has decreased in recent years as shown by the per capita use figures in Table 4-1. The annual per capita usage from 1940 to 1970 averaged about 0.31 acre-feet per person (AF/capita). In the period 1985-1989 (pre-mandatory water conservation), the annual per capita use averaged about 0.22 AF/capita. In the period 1994-2004 (post mandatory water conservation), the per capita figure dropped to an average of 0.18 AF/capita. This decrease in per capita consumption is the result of plumbing improvements such as low flow fixtures and low water consuming appliances in some existing and all new housing; and an active water conservation program adopted by the City in 1975 and further strengthened with mandatory regulations in 1990. Mandatory regulations were lifted in 1993, however water conservation efforts remain very effective.

Table 4-1
Historic Water Production and Population⁶

Year	Total Prod. ¹ (AF)	Raw Water Use (AF)	Treated Water Use ² (AF)	Est. Pop. Served by Water System ³	Per Capita Use ⁴ (AF)	Annual Rainfall (in.) ⁵
1940	4,240	0	4,240	13,264	0.320	12.54
1950	5,307	0	5,307	16,534	0.321	13.34
1960	8,832	0	8,832	29,114	0.303	12.08
1970	21,524	4,473	17,051	57,964	0.294	13.92
1980	22,147	4,766	17,381	74,393	0.233	24.78
1990	19,148	2,317	16,831	94,856	0.177	5.53
2000	21,566	1,129	20,437	103,238	0.198	17.04
2001	18,960	1,144	17,816	104,153	0.171	23.22
2002	19,934	968	18,966	105,267	0.180	7.24
2003	20,394	846	19,548	106,782	0.183	20.06
2004	22,298	940	21,358	109,002	0.196	11.78
Average	1940-70	Historical			0.31	
Average	1985-89	Pre-Mandatory Water Conservation			0.22	
Average	1994-2004	Post-Mandatory Water Conservation			0.18	

Notes:

¹ Total production includes all water produced by the City, including raw water/oil use.

² Treated water use is total production less raw water use.

³ Refer to Table 2-1

⁴ Per capita use excludes raw water (treated water use/population).

⁵ Annual rainfall is the average of measured precipitation from four rain gauge stations throughout the City, (Stations #66, #122, #167 and #223), as provided by the Ventura County Flood Control District web site (www.countyofventura.org)

⁶ 1940-90 figures are from the City of San Buenaventura, "Water System Operational Evaluation and Improvement Program," Boyle Engineering Corporation, June 1993, Table ES-1.

A breakdown of water consumption from fiscal year water billing records for each major user group is shown in Table 4-2. Consumption data allows the City to accurately monitor usage per user type and foresee developing trends in water demand.

Table 4-2

Historic Fiscal Year Water Consumption by User Group In Acre Feet

	FY 00-01	%	FY 01-02	%	FY 02-03	%	FY 03-04	%	FY 04-05	%	Connections FY 04-05
Single Family	7,122	41%	7,297	42%	7,459	42%	7,556	43%	7,527	42%	22,800
Multi Family	3,846	22%	3,853	22%	3,752	21%	3,770	22%	3,887	22%	2,269
Commercial	3,833	22%	3,887	23%	3,951	22%	4,031	23%	4,279	24%	2,536
Industrial	276	2%	241	1%	296	2%	233	1%	163	1%	9
Institutional	637	4%	617	4%	619	3%	607	3%	607	3%	252
Landscape	320	2%	304	2%	431	2%	373	2%	369	2%	202
Agriculture	87	1%	96	1%	76	0%	79	0%	63	0%	9
Other	1,055	6%	967	6%	1,129	6%	762	4%	1,002	6%	2,876
Total	17,177	100%	17,262	100%	17,714	100%	17,411	100%	17,897	100%	30,953

Population Projections

The City's estimated population growth for the water service area is shown in Table 4-3. The source is the California State Department of Finance, with future population projection reflecting a 0.88% annual growth rate, which is equivalent to the City's annual growth over the past 10 years. In addition, future population for the unincorporated areas served by the City's water system is based on 2005 customer count with a growth rate of 0.35%. Population estimates were extrapolated to fit 5 year increments. It is important to note that these figures are not intended to represent support for nor reflect any commitment to this level of growth. Rather, it is to provide a safe margin in planning for long-term water improvements that might be needed given the amount of growth that could be allowed under the City's 2005 Environmental Impact Report (EIR) for the updated General Plan. Included for comparison is the EIR population projection reflecting the two possible growth scenarios: (1) 1.14% annual population growth, which is equivalent to the annual growth rate in the City over the past 20 years; and (2) 0.88% annual population growth, which is equivalent to the annual growth over the past 10 years.

Table 4-3

Planning Area Population Projections

Year	Projected Population Planning Area	EIR Population @ 0.88%	EIR Population @ 1.14%
2005	109,812		
2010	114,629		
2015	119,659		
2020	124,913		
2025	130,400	126,153	133,160

Future Water Demand

For planning purposes, in 1990, the City used 0.22 AF of water per capita per year based on the average pre-mandatory conservation per capita use data (See Table 4-1). Anticipated demand reductions, through long-term conservation programs, have lowered the per capita water usage factor. Estimated demand reductions due to conservation in 1990 were anticipated to be five percent in 1995 (0.209 per capita use), 10 percent in 2000 (0.198 per capita use), and 12 percent thereafter (0.194 per capita use). The figures in Table 4-1 show that the reductions assumed in 1990 have been exceeded and are now around 18 percent. Based on data from the past 11 years since mandatory conservation ended, the average per capita usage is 0.181 AFY. For the purpose of this report 0.18 AFY per capita will be used to estimate future water demands.

Raw water demand for oilfield injection has declined. Average raw water usage for the past 5 years was 1005 AFY. For purposes of this report future raw water demand of 1,000 AFY will be used.

Applying these per capita demand factors to the projected population provides an estimate of treated water demand for the next 20 years, as shown in Table 4-4.

Table 4-5 reflects a breakdown of water consumption over the next 20 years by major user group. User group distribution is based on previous five-year average (2000-2004) historical data.

Table 4-4
Projected Water Demand (Acre Feet)
(Normal Year, Weatherwise)

Year	Est. Water Service Area Pop. ¹	Per Capita Usage AFY ²	Treated Water Demand ²	Raw Water Demand	Total Water Demand
2005	109,812	0.18	19,766	1,000	20,766
2010	114,629	0.18	20,633	1,000	21,633
2015	119,659	0.18	21,539	1,000	22,539
2020	124,913	0.18	22,484	1,000	23,484
2025	130,400	0.18	23,472	1,000	24,472
2025 ³	126,153	0.18	22,708	1,000	23,708
2025 ⁴	133,160	0.18	23,969	1,000	24,969

Notes:

¹ Estimated planning area populations are from Table 4-3.

² Treated water demand is estimated population multiplied by 0.18 AF/capita based on 1994-2004 average post mandatory water conservation per capita use from Table 4-1.

³ Reflects EIR 0.88% population estimate for the 2005 general plan.

⁴ Reflects EIR 1.14% population estimate for the 2005 general plan.

Table 4-5

Projected Water Consumption in Acre Feet by User Groups

User Group	Projected %	YR 2005	YR 2010	YR 2015	YR 2020	YR 2025
Single Family	42.26%	8,776	9,142	9,525	9,924	10,342
Multi Family	21.85%	4,537	4,727	4,925	5,131	5,347
Commercial	22.84%	4,743	4,941	5,148	5,364	5,589
Industrial	1.39%	289	301	313	326	340
Institutional	3.53%	733	764	796	829	864
Landscape	2.05%	426	443	462	481	502
Agriculture	0.46%	96	100	104	108	113
Other	5.62%	1,167	1,216	1,267	1,320	1,375
Total	100%	20,766	21,633	22,539	23,484	24,472

4.2 - Residential Sector

The residential sector of the City is comprised of single and multi-family residential customers. Currently, there are approximately 22,856 single family and 2,270 multi-family residential customers. The latter represents 19,299 residential dwelling units. This difference between customer accounts and residential units illustrates the impact of master metering on apartments and condominiums, whereby one meter serves a number of units. This sector represents approximately 64% of the City's water consumption.

4.3 - Commercial Sector

The City contains several different types of commercial customers, including gas stations, large shopping complexes, auto dealerships, restaurants, business parks, office buildings, hotels, and hospitals (one private and one public) to name a few. The City includes several tourist driven businesses such as hotels, which benefit from the high volume of tourist traffic.

The largest commercial sector users are hotels and hospitals. The commercial sector accounts for approximately 23% of the City's water consumption.

4.4 - Industrial Sector

The City contains a relatively small industrial section. Aside from the oil industry accounts, most of the industrial sector is centered on food industries. The industrial sector utilizes 1% of the City's water demand.

4.5 - Institutional/Government Sector

The City's institutional and governmental sectors are relatively stable. The City is also the county seat and therefore contains a large government center and jail complex. In

addition, school facilities and churches are included in this sector. The Institutional/Government Sector utilizes approximately 4% of the water demand.

4.6 - Landscape/Agricultural/Other Sector

The City maintains 34 developed parks and 45 miles of linear parkways. In addition, there are two 18-hole tournament class public golf courses served by reclaimed water for all turf areas. The golf courses have potable water for the clubhouse, restrooms and drinking fountains and use reclaimed water for irrigation. Agriculture uses has a very low demand on water consumption at 0.46%. In total, the water demand for this sector of the City accounts for 8% of the City's water consumption.

4.7 - Supply and Demand Comparison

Water Supply Projection

Table 4-6 summarizes the City's projected water demand and supply through the year 2025. Additional future water supplies will not be needed under average non-drought weather conditions. However, to satisfy water quality goals established by the City Council in the Comprehensive Plan Update to the Year 2010 (less than 800 ppm Total Dissolved Solids (TDS) water quality throughout the entire City), additional water supplies beyond those indicated in Table 4-6 would be required.

Table 4-6
Summary of Projected Water Demand and Supply (Acre Feet)
(Non-Drought Conditions)

Year	Projected Planning Area Pop. ¹	Projected Water Demand ²	Projected Water Supply ³	Additional Water Supply Needed ⁴
2005	109,812	20,766	23,300	None
2010	114,629	21,633	29,900	None
2015	119,659	22,539	29,900	None
2020	124,913	23,484	29,900	None
2025	130,400	24,472	29,900	None
2025 ³	126,153	23,708	29,900	None
2025 ⁴	133,160	24,969	29,900	None

Notes:

¹ Projected planning area population is from Table 4-3.

² Projected water demand is from Table 4-4.

³ Projected water supply is from Table 3-6.

⁴ Additional water supply needed is the projected water supply subtracted by the projected water demand.

⁵ Reflects EIR 0.88% population estimate for the 2005 general plan.

⁶ Reflects EIR 1.14% population estimate for the 2005 general plan.

4.8 - Future Supplemental Supply

The City will continue to implement improvements to our water system as previously stated in section 3.6. The 2006 update of the City's Water System Master Plan along with the City's current Capital Improvement Projects (CIP) will identify improvements needed to increase production capacity and storage, improve our ability to move water from the diverse sources of supply to all points of use, improve reliability and safety.

Water quality improvements are not being addressed in the 2006 Master Plan update. However, the City continues to implement improvements to the water system and update the five year CIP plan each year, which is essential to meet future water production, storage and transport needs in non-drought and drought conditions.

Along with the CIP programs the City will continue to pursue the following system efficiency improvements, which will increase the water system's capability of supporting increased demands in the future.

1. Continue to work with participating agencies on the Ventura River Watershed and Habitat Conservation Plans for Steelhead Trout.
2. Continue discussions with local agencies concerning our State Water Project Entitlement.
3. Continue work towards development of Santa Paula Basin Operational/Management Plan with United Water Conservation District & Santa Paula Pumpers Association.
4. Implement the recommendations in the West County Water Supply Reliability Study, which would provide an emergency interconnection between the Ventura and Oxnard water systems.
5. Work with the Casitas Municipal Water District to formally define the City's water service in the North Ventura Avenue area.

In addition, the 1994 Comprehensive Water Resources Management Plan also stated the following, "The City should have a program in place which can provide advance warning and a decision making process for the need of a supplemental water supply, whether the need be for drought-proofing or for long-term base-loaded supply. The program should include an annual review of critical water supply conditions with a biennial report provided to the Council in the fall of even numbered years. A ten-year projection should review critical water supply conditions including the production from the Ventura River, storage in Lake Casitas, the balance in the Fox Canyon GMA groundwater bank, the condition of the Mound and Santa Paula Basins, and the water demand in the City. Based on that projection, the Council will be asked to certify whether the then-existing water supply and planned improvements are sufficient to satisfy the City's water needs for the ensuing ten years." The above process has been in place since 1996, and is submitted biennially to the City Council. The last submittal was October 2004.

Section 5 - Water Conservation Programs

Since 1975 the City's water conservation program continues to be effective in controlling Ventura's water demand. The success is due in part to the continuing efforts by our customers to conserve water, the building and plumbing industries and the Ventura City Council's continuing support of conservation programs.

A requirement of the Urban Water Management Plan is to provide information related to each water Demand Management Measures (DDM). These include but are not limited to the following:

- A. Water survey programs for single-family residential and multifamily residential customers.
- B. Residential plumbing retrofit.
- C. System water audits, leak detection, and repair.
- D. Metering with commodity rates for all new connections and retrofit of existing connections.
- E. Large Landscape conservation programs and incentives.
- F. High-efficiency washing machine rebate programs.
- G. Public information programs.
- H. School education programs.
- I. Conservation programs for commercial, industrial, and institutional accounts.
- J. Wholesale agency programs.
- K. Conservation pricing.
- L. Water conservation coordinator.
- M. Water waste prohibition.
- N. Residential ultra-low-flush toilet replacement programs.

A discussion of the City's efforts to implement the DDMs is given in the section below. In addition, the City submits their Best Management Practices or DDMs activity report to the California Urban Water Conservation Council each year.

5.1 - BMP 1 - Water Survey Programs for Single Family and Multi Family Residential Customers

Water Audits

The City has an information campaign, which notifies water customers of a water audit program. The City's Utilities Office will issue notifications to customers who show a high water consumption on their utility bill. Customers are encouraged to contact the City to request a water audit. The City investigates both exterior and interior water usage, identifies areas of potential over-use and possible leaks and encourages retrofit of plumbing fixtures inside and outside where needed. In fiscal year 2004-2005 the City performed 1,301 residential audits.

The City will continue to perform residential audits annually. Audits would include the following:

- Inspection of customer's water system.
- Evaluation of customer's water use both inside and outside.
- Recommendation of measures to reduce water use.
- Information on new water saving devices.
- Education on general water conservation practices.

5.2 - BMP 2 - Residential Plumbing Retrofit

The City currently supplies low flow (2.0 gpm) showerheads and toilet tank displacement bags, kitchen and bath aerators, and toilet dye tablets to customers on request. In the past five years the City has distributed over 8,000 devices to Ventura customers. The City intends to continue this program.

5.3 - BMP 3 - System Water Audits, Leak Detection and Repair

Metered Water Use

All water customers in the City service area are metered. All fire lines are fitted with bypass detection meters to ensure that no water is inadvertently released or unaccounted. All construction water is assigned a temporary meter, no matter how small the job. This is done through a permit process.

Source Meters

The City meters all water sources into the water system and will continue to do so as new water sources are developed. All source meters are regularly maintained and calibrated.

Meter Testing and Calibration

All City and customer meters are tested, calibrated, or replaced on a regular basis. The City has its own meter shop, large meter testing truck, and maintains detailed meter test records. The City can currently test meters 6 inches and smaller.

The City has a replacement program for meters 2 inches and smaller. Service meters less than two inches, if assumed to be in error are tested, and if found to be out of calibration are replaced, or if under 10 years of age they may be rebuilt under warranty. All small meters are replaced after 15 years of age regardless of condition. The City has established a large meter testing program for meters larger than two inches. The City tests and calibrates all large service meters annually. Records are maintained to chart meter performance. The City's annual meter testing and replacement programs will help insure the accurate accounting of water sales and source production.

Computer Controlled Water System

The City has a SCADA computer monitoring and control system, which provides automatic input readings from pump stations, reservoirs, source meters, and wells. This data is helpful in determining trends and demands within specific areas of the water service area. Pumps are controlled through the SCADA system primarily based upon reservoir levels. Future water system expansion will include additional SCADA expansion.

Leak Detection

The City has a leak detection program to aid the City and customers in identifying water loss. City personnel are trained in the procedures of leak detection surveys and the use of up-to-date detection equipment. Recently, the City purchased two Meter Master Flow Recorders to support our customer service representatives in leak detection. The leak detection program is a continuous effort by the City to minimize water loss and complement the City's water audit program.

Pipeline and Facility Replacement Program

The City is committed to the maintenance and improvement of its water facilities. The current Capital Improvement Program includes annual replacement of older water pipelines within the City service area. This year's Capital Improvement Projects identifies sixteen waterline replacement projects, with an estimated value of \$31.2 million dollars over the next five to ten years. Priorities for replacement are based upon the age of the line, leak history, and future street improvements. The City is committed to this program to help reduce the amount of unaccounted water lost in the distribution system and replace old pipes before they might leak, thereby supporting water conservation efforts. In 2004, the City completed a Corrosion Study that recommended replacing certain cast iron pipelines, which have a history of leakage.

Unaccounted System Losses

The City conducts an annual system check of unaccounted-for-water loss by comparing source production and customer metered records. All water suppliers have additional water uses and unaccounted for system losses. This includes, but is not limited to main waterline flushing, water rights, water main breaks/leaks, firefighting, and water tank/plant maintenance just to name a few. It should be noted that the City has averaged 13.0% unaccounted-for-water loss over the last ten years. However, recent results for fiscal year 2004 - 2005 reflect 9.74%. This percent is relatively low when considering the age and size of the City's water system. This monitoring is an ongoing program.

5.4 - BMP 4 - Metering with Commodity Rates

Metering

All uses (with the exception of fire hydrant testing) are metered. This includes public landscaping and construction water.

Commodity Rates

All accounts have commodity rates whereby the customers pay based upon all water used per HCF. Since rates are dependent on water used, this promotes water conservation. The FY 2005-2006 bi-monthly water rates in Hundred Cubic Feet (HCF) are shown in Table 5-1.

Table 5-1

FY 2005-2006 Water Rates

Class	Tier	City Rate HCF	County Rate HCF	Single Family Units-HCF	Multiple Family Units-HCF	Other Accounts
Residential	1	\$1.60	\$2.71	1-16	1-10	Tier Rate
	2	\$2.11	\$3.59	17-42	11-24	Tier Rate
	3	\$3.39	\$5.76	43+	25+	Tier Rate
Non Residential	-	\$2.11	\$3.59			Flat Rate
Raw Water, Irrigation, & Municipal Parks		\$1.11	\$1.11			Flat Rate
Reclaimed Water		\$0.48	\$0.48			Flat Rate

The above rates apply to City and County customers. For multi-family units with master meters, the allowable water units are multiplied by the number of residential units. Even accounting for higher summer use, the majority of residential customers do not have to pay the third tier, which is intended for the highest water-use customers. Reclaimed water rates are quite low and provide an incentive to customers to use it if possible. This is an ongoing program.

5.5 - BMP 5 - Large Landscape Conservation Programs

The City supports large landscape audits to improve water efficiency. Currently, our customer service team provides on-site support to the customer upon request. Working with the customer and often times with the landscape contractor, they help identify

water loss problems such as leaky pipes, irrigation timing problems and irrigation system checks. This is an ongoing program.

All new commercial/industrial or public landscapes are required to be low water use design and use automatic controls for off peak irrigation and other conservation measures. All landscaping, including residential, is to be reviewed against specified guidelines (Appendix E). This is an ongoing program and is part of the City plan review process.

5.6 - BMP 6 - High Efficiency Washing Machine Rebate

Currently, the City has not established funding to implement this rebate program.

5.7 - BMP 7 - Public Information

The City has compiled and developed many pamphlets for dissemination to customers and the general public. These pamphlets are designed to educate and assist the public on water conservation and how to become efficient water users. Information is directed mainly to residential customers with the assumption that conservation will be carried into the work place. The following is a list of informational materials currently disseminated to customers upon request and at public events.

- Ventura Public Works Utilities - Here for you
- Water Saving Plants
- Lawn Watering Guide
- Annual Consumer Notification Water Quality Report
- How to Fix Leaky Faucets
- Yes You Can Fix A Leaky Faucet by Yourself. (AWWA)
- Water Conservation at Home (AWWA)
- A Consumer's Guide to Water Conservation (AWWA)
- The Inside/Outside Story (AWWA)
- How Much Water Does Your Lawn Really Need? (Sunset Reprint)
- Drought Survival Guide For Home and Garden (Sunset Reprint)
- 55 Facts, Figures & Follies of Water Conservation (AWWA)

In addition, the City reflects previous year's water usage to current year's water usage on the bi-monthly billing of each customer. This combined with a seasonal conservation message on the back of each bill is a very cost effective method to promote water conservation.

Through subtle advertising and handouts, the City continues to remind the public that water is a limited resource.

Demonstration Program

On an annual basis the City demonstrates water conservation methods at local county fairs and public events. This promotes public awareness and is an active program at the City.

The City constructed Peppertree Corner, a demonstration garden. This garden displays conservation landscaping or “Hydrozoning”. Hydrozoning groups plants of similar water, sun and soil needs into the same area and matches an irrigation system to those area. The plants at Peppertree Corner range from succulents to citrus trees with a variety of groundcovers, shrubs and perennials. The garden demonstrates the use of various plants for hedges and screens, slope stabilization, size, color, texture and water needs. A brochure has been prepared to identify the different plants used in the garden.

Tours

The ongoing conservation demonstration and tour of our water and wastewater treatment plants is a very popular program with various organizations. General water conservation is promoted during these tours, which promotes public awareness. This is an ongoing program.

5.8 - BMP 8 - School Education Programs

Educational Information Materials

The City developed an in-school water conservation education program in 1987. Currently, the City offers free water conservation programs for 2nd & 5th grade level. Students receive information about the water cycle, water sources, and important water conservation issues. Each fiscal year approximately 1,000 students attend these programs. The City’s Coordinator of Educational Outreach Programs administers the program through the City’s Community Services Department. In addition the City lends conservation films to schools, public service groups, and other organizations on request. This is an ongoing program.

Educational materials currently supplied to schools are:

- I’m A Winner (AWWA sticker)
- Water Conservation Bookmark - City
- Saving Water Inside and Out (Channing L. Bete)
- Save Water and Enjoy It! (Channing L. Bete)
- Protecting Our Water Supplies (Channing L. Bete)
- My Book About Water (Channing L. Bete)
- Conservation Stickers (Channing L. Bete)
- Use Water Wisely (Charming L. Bete)
- The Water Cycle (Channing L. Bete)
- 5 Minute Shower Timer with Conservation Tips

Currently, the City is in its seventh year of conducting a water conservation poster contest. Students from kindergarten through eighth grade, who attend public or private schools within the City, are invited to participate. The winning posters are turned into a 12-month calendar. Through the creativity of children's art we can raise public awareness about water conservation. This is an ongoing program.

5.9 - BMP 9 - Commercial/Industrial Programs

The City has compiled and developed many pamphlets for dissemination to customers and the general public. Information is directed mainly to residential customers with the assumption that conservation will be carried into the work place. See BMP 7 for a list of informational materials currently disseminated to customers.

5.10 - BMP 10 - Wholesale Agency Programs

In August 1992, the City adopted a resolution establishing the Water Demand Reduction Offset Program (Resolution 92-73) for new commercial and industrial development. The program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alternations would be allowed only if the developer offsets their increased water demand at a 3:1 ratio through toilet retrofitting. The development moratorium remained in place for residential development. In May 1993, the program was extended to all residential construction requiring that increased water demand be offset at a 2:1 ratio through toilet retrofitting (Ordinance 93-08). This program was suspended in July 1998. It should be noted that State Plumbing Code requires the installation of low water use fixtures in all new construction. City Plumbing Code requires remodel construction to retrofit the entire building with low flow fixtures.

5.11 - BMP 11 - Conservation Pricing

Increasing Block Rates

The City has increasing block rates for all residential water customers and uniform rates for other water customers. All sewer customers are on a commodity rate, which also promotes water conservation. Increasing block rates are designed, whereby the cost per unit of water increases with usage, to promote water conservation. The rates have been structured to include future capital expenses. Both sewer and water rates were adopted by Ordinances 2005-005 and are in effect for FY 2005-2006. (See Figure 5-1 at the end of this section).

5.12 - BMP 12 - Water Conservation Coordinator

The City has a conservation coordinator in the Utilities Business Division of the Public Works Department, with approximately 30 percent of budgeted time devoted to water conservation. The actual time varies, depending upon other City needs.

5.13 - BMP 13 - Water Waste Prohibition

In April, 1989, the City adopted Ordinance 89-6 (see Appendix D), prohibiting water waste. Among other uses prohibited are gutter flooding, non-recirculating fountains, customer plumbing leaks, hosing of hard surfaces and automatic water serving in restaurants. The ordinance defined prohibited activities and the penalties to be imposed for violations.

5.14 - BMP 14 - Ultra-Low Flush Toilet Replacement

In October 1991 the City adopted a resolution establishing a Toilet Rebate Program. Through this City incentive program, a City water customer received \$80.00 for replacing each 5-gallon per flush or larger toilet with an ultra low volume toilet. The program was discontinued in the fall of 1995 when funding ended. An estimated 7,550 toilets were retrofitted with an annual savings of approximately 380 AFY. In addition, the City has an ordinance requiring all homeowners remodeling, extending or adding kitchens, bathrooms or laundry facilities, which involves an increase in the number of plumbing fixtures, to retrofit with water-efficient plumbing fixtures throughout the residence.

5.15 - City Conservation Resolutions/Ordinances

The following resolutions and ordinances have been adopted by the City relating to water supply and conservation.

- In 1983, the City adopted the County Conservation Management Plan (Resolution 83-1 68) (see Appendix E) and began examination of existing water sources, primarily groundwater basins shared with other agencies.
- The City prepared and adopted an UWMP required by state law in December, 1986 (Resolution 86-170) (see Appendix E). In the 1986 UWMP, the City included a proposed emergency preparedness plan to coordinate action in the event of resource shortage due to natural disasters.
- The City prepared and adopted rate changes for all water customers and modified its increasing block rates in 1988 (Ord. 88-22) to promote water conservation and then modified the rates again in 1989 (Ord. 89-10), based upon recommendations from a rate study completed by engineering consultants. Further rate increases have been implemented with the latest one in July 2005 (Ord. 2005-005 - Appendix D)
- In April 1989, the City adopted Ordinance 89-6 (Appendix D) prohibiting water waste. The ordinance defined prohibited activities and the penalties to be imposed for violations.

- The City adopted Ordinance 89-25, which revised its building code effective January 1990 to require installation of ultra low flush (ULF) toilets for all new construction. This implementation schedule was two years ahead of state law requirements for January 1992 (AB 2355) and was the first such ordinance in Ventura County.
- In February 1990, the City adopted Resolution 90-16, declaring a water shortage emergency. Following public hearings to determine what regulations should be implemented to respond to drought-induced water supply shortages, the City adopted ordinances 90-03, 90-08, and 90-16 in March 1991. These ordinances establish mandatory water conservation regulations to reduce water demands throughout the city.
- In 1990, the City Council committed the City to a course of action on water planning and implementation by adopting Resolution 90-79. This action outlines the City's goals to offset water shortfalls and to plan and implement a Comprehensive Water Resource Management Plan to manage water supplies for the short and long term.
- In October 1991, the City Council adopted Resolution 91-94 amending the Urban Water Management Plan (UWMP) for 1990 in compliance with the UWMP Act (AB 2661).
- In October 1991, the City adopted a resolution establishing a Toilet Rebate Program.
- In April 1992, the Mandatory Water Conservation Ordinance was modified to reduce the conservation goal to 15 percent. This change was based upon improved production from the Ventura River.
- In August 1992, the City adopted a resolution establishing the Water Demand Reduction Offset Program (Resolution 92-73, Appendix 17) for new commercial and industrial development. The program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alternations would be allowed only if the developer offsets their increased water demand at a 3:1 ratio through toilet retrofitting. The development moratorium remained in place for residential development. In May 1993, the program was extended to all residential construction requiring that increased water demand be offset at a 2:1 ratio through toilet retrofitting, Ordinance 93-08. This program was suspended in July 1998.
- The citizens of Ventura voted on November 3, 1992, in favor of desalinating seawater over importing water through the SWP as the preferred supplemental water source.

- On March 1, 1993, the City Council approved Ordinance 93-01 which eliminated the penalty provisions of the Mandatory Water Conservation Regulations. This decision was based on two factors: 1) improved water availability due to high Ventura River flows and 2) the expectation that Venturan's will continue their commitment to water conservation.
- Approved by City Council on June 28, 1993, Ordinance 93-23 officially terminated the City's three-year old water shortage emergency.
- In December 1994, the City adopted the Comprehensive Water Resources Management Plan (CWRMP) as a policy document to provide for rational management of the City's water resources to ensure a reliable water supply during future droughts (see Appendix B). The plan addresses water policy concerns, water quality, sets the means to evaluate the need for a supplemental water supply, and establishes a water policy role for the City Council. The CWRMP requires a biennial water supply report that updates City Council on the status of water supply availability.
- In May 1996 the City adopted Resolution No. 96-51, the 1996 Urban Water Management Plan; and the 2000 Urban Water Management Plan on February 12, 2001 (Ord. 2001-20) (see Appendix E).
- On April 20, 2004 City Council approved Ordinance 2004-008, which requires all multi-unit buildings constructed after July 1, 2004 to be equipped with sub-meters.

5.16 - Regional Participation

The City is regionally active in conservation and are participants in the following local organizations and plans:

- Ventura County Association of Water Agencies (AWA).
- Fox Canyon Ground Water Management Agency.
- Santa Paula Basin Technical Advisory Committee.
- Channel Counties Water Utility Association.
- Countywide Integrated Water Resource Management Plan (RMA).

During 2005, the major water purveyors in Ventura County undertook Integrated Water Resource Management Planning (IWRMP). The purpose of the regional plan was to describe water systems and their common elements to assist in developing capital projects that would tend to integrate water system infrastructure and improve reliability and redundancy in the County. Completion of the plan is expected at the end of 2006 and may help some of the projects qualify for Proposition 50 funding.

As a signatory to the CUWCC, the City continues to set a good example of implementing a proactive water conservation program in Ventura County.

Figure 5-1

City of San Buenaventura FY 2005-2006 Water and Wastewater Rates

[illegible]

Section 6 - Water Shortage Contingency Plan

6.1 - Introduction

In October 1991, the Governor signed legislation that required each California urban water supplier providing municipal water directly or indirectly to more than 3,000 customers or supplying more than 3,000 AF of water annually to develop a Water Shortage Contingency Plan. Although the specific requirements of the law were based on water shortages from the current drought, the plan is intended to better prepare agencies and the State to deal with shortages resulting from earthquakes, fires, system failures, contamination, and future droughts. Although the City's Comprehensive Water Resources Management Plan does not plan for additional conservation beyond the 12 percent long-term conservation goal, the City prepared this Water Shortage Contingency Plan section to be in compliance with the Urban Water Management Plan requirements.

6.2 - Water Supply Reliability

The existing water sources available on a long-term basis are summarized in Section 3. Casitas and the GMA have both adopted allocation systems that define upper limits on the City's usage, and these limits are lower than the water the City has taken in the past. The City continues to improve groundwater sources on the east side of the City.

As summarized in Table 4-6, additional water supplies will not be needed until sometime after 2025 under average non-drought weather conditions. However, the City will continue to develop additional water sources as well as improve the quantity of existing supplies as identified in Section 4-8. New water supply projects identified in the current 2005 - 2010 Capital Improvement Projects include Saticoy Well #3 and the Saticoy County Yard Well. Numerous waterline replacement projects are planned, which will improve fireflow, and reliability through the elimination of main breaks and water outages during peak demand periods. In addition, planned improvements to the various water facilities, booster pump stations and tanks shall continue to provide a safe and reliable drinking water supply. The Biennial Water Supply Report, which is prepared every two years, helps to ensure that the City is aware of current supply and demand conditions.

While some primary capital improvement projects are focused on improving the City's available water supply, these programs will also partially improve water quality in the process. Additional capital projects that have the sole purpose of improving the quality of delivered water are not being pursued at this time. These could include seawater desalination, groundwater softening or importing state water. These projects will be considered in conjunction with the development of a long-term supplemental water supply source. Water quality improvement is made possible by shifting water supply from eastside groundwater to new sources with lower TDS. As stated previously, the

westside surface water sources have better quality water when compared to the other existing eastside groundwater sources.

6.3 - Three-Year Worst Case Scenario

The primary factor in limiting the City's existing water supplies is drought. In evaluating a three-year worst-case water supply scenario, the City assumed that severe drought conditions (no rain and above average temperatures) would begin immediately and continue for three consecutive years. Planned water sources for fiscal year 2005, reflecting capacity of current facilities will be used as an average/normal water year base for estimating purposes. Also, it was assumed that demand would not be reduced in response to the drought conditions. Available water supplies during the three year period were projected considering: 1) the current status of each existing source and 2) the past response of each existing source to similar drought conditions. In addition, Table 6-1 reflects a single dry water year and Table 6-2 provides a summary of single dry water years in five-year increments over twenty years, compared to projected water demand.

Also, Table 6-1 illustrates a potential three-year worst-case scenario. Table 6-4 reflects the required multiple-dry water years during the twenty-year projection period in five-year increments. It must be remembered that the scenarios include assumptions for purposes of illustration and during drought conditions agencies often find ways to mitigate the shortages. Also, because of the complexities of the City's water sources, the specific numbers are only approximations.

Table 6-1

Supply Reliability and Demand Comparison (Acre Feet)

	1 Average/Normal Water Year	2 Single Dry Water Year	Multiple Dry Water Years		
			Year 1	Year 2	Year 3
Ventura River ³	6,700	2,859	2,859	1,430	700
Casitas ⁴	8,000	7,090	7,090	7,090	4,960
Oxnard Plain GW ⁵	4,600	4,400	4,400	4,400	4,400
Mound Basin GW ⁶	5,700	4,365	4,365	2,838	2,270
Santa Paula GW ⁷	2,600	3,000	3,000	3,000	3,000
Saticoy County Yard Well ⁸	0	1,800	1,800	900	675
Total Source Capacity	27,600	23,514	23,514	19,658	16,005
Less Raw Water Demand ⁹	1,000	1,000	1,000	1,000	1,000
Available Treated Water	26,600	22,514	22,514	18,658	15,005
Total Treated Water Demand ¹⁰	19,766	19,766	19,766	19,937	20,109
Demand Delta	6,834	2,748	2,748	-1,279	-5,104
Banked Groundwater Used ¹¹	0	0	0	1,300	5,120
Surplus Available for Banking ¹²	6,834	2,748	2,748	21	16

Notes:

¹ From Table 3-6 Year 2005 data with adjustment to Ventura River to reflect capacity of current facilities with a full basin.

² Rainfall in 1990 was 5.53 inches, well below the yearly average of 15 inches. For a single dry water year, 1990 historical data is used for the Ventura River and Mound Basin (ref. Table 3-6). Casitas reflects Stage 2 allocation, Oxnard source reflects the future available supply per GMA Ordinance. Santa Paula Basin reflects allocated amount per UWCD agreement and Saticoy Yd Well reflects 75% of average year (see Table 3-8).

³ Ventura River available supply in Year 1 reflects the single dry water year. Year 2 is 50% of Year 1. Year 3 is the worst-case available annual yield per the Comprehensive Water Resources Management Plan.

⁴ Casitas available supply during Year 1 and 2 reflects stage 2 allocation with year 3 reflecting stage 5 allocation.

⁵ Oxnard Plain available supply assumed to be the City's allocation at 80% per GMA Extraction Reductions (Table 3-2).

Notes (continued)

- ⁶ Mound Basin available supply for year 1 is assumed to be the single dry water year, decreasing in Year 2 by 35% based on 1990/1991 historical data. Year 3 reflects a 20% decrease of year 2.
- ⁷ Santa Paula Basin available supply assumed to be City's allocated amount per agreement with UWCD.
- ⁸ Saticoy County Yard Well year 1 is assumed to be 75% of average year. Year 2 at 50% of year 1 and year 3 at 75% of year 2 (See Table 3-8).
- ⁹ From Table 4-4
- ¹⁰ From Table 4-4. Average and Single Dry Year reflects per capita use of .18 to projected 2005 population. The three multiple dry years also reflect 0.18 per capita water uses to extrapolated population estimates. (Population year 1 = 109,812; year 2 = 110,759; year 3 = 111,714).
- ¹¹ Reduced water demands have allowed the City to store 35,447 AF in the GMA bank at the end of calendar year 2004. The use of banked groundwater would reduce our reserve but allow the City to meet its treated water demand.
- ¹² Surplus for banking is the lesser of net supply or GMA allocation amount.

Table 6-2

Summary of Projected Single Dry Water Year Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Single Dry Water Year Supply ³	Difference (Supply-less-Demand)	Difference As	
					% of Supply	% of Demand
2010	114,629	21,633	25,464	3,831	15.0%	17.7%
2015	119,659	22,539	25,464	2,925	11.5%	13.0%
2020	124,913	23,484	25,464	1,980	7.8%	8.4%
2025	130,400	24,472	25,464	992	3.9%	4.1%

Notes:

¹ Projected planning area population is from Table 4-3

² Projected water demand is from Table 4-4

³ Projected water supply is from Table 6-1 for a Single Dry Water Year (23,514 a/f) reduced by 300 a/f, per GMA Extraction Requirement. Plus the New Saticoy Well #3 (Ref. Table 3-8, 2,250 a/f)

It should be noted that without the banked water in the Fox Canyon Aquifer, there would be shortages in year two and three of the multiple dry water years reflected in Table 6-1. Year two reflects a shortfall of 1,279 and year three 5,104 or 6% and 25%, respectively of total demand. However, taking into account the new Saticoy Well #3 (Table 3-8), these shortfalls can potentially be reduced as reflected on Table 6-3. Because of the banked water in the Fox Canyon Aquifer and the future water supply projects, under this drought condition there would be no need for rationing. However, if rationing became required, possible courses of action would be to:

- 1) Accelerate the completion of the Water Supply CIP Projects.
- 2) Increase pumping from the Santa Paula Basin.
- 3) Through voluntary, and then mandatory water conservation, reduce demand.

What if a drought occurred after the year 2010? Since the City does not use banked water except for emergencies, presumably there would be banked credits in the Fox Canyon Aquifer, and presumably the Mound and Santa Paula Groundwater Basins would have increased yields, also mitigating the problem.

Table 6-3
Demand Comparison with Additional Water Supply

	Multiple Dry Water Years		
	Year 1	Year 2	Year 3
Available Treated Water ¹	22,514	18,658	15,005
Saticoy Well #3 ²	2,250	1,125	844
New Total Available Water	24,764	19,783	15,849
Less Water Demand ¹	19,766	19,937	20,109
New Demand Delta	4,998	-154	-4,260
Demand Shortfall %		-0.8%	-21.2%

Notes:

¹ From Table 6-1

² From Table 3-8

Table 6-4

Summary of Projected Multiple-Dry Three Year Water Demand and Supply
(Five Year Increments in Acre Feet)

Year	Projected Planning Area Population ¹	Projected Water Demand ²	Projected Supply Multiple-Dry Water Years ³	Difference (Supply-less-Demand)	Banked Groundwater December 2004	
					Standalone ⁴ 35,447	CUM ⁵ 35,447
2008	112,677	21,282	25,764	4,482	39,929	39,929
2009	113,648	21,457	20,783	-674	39,256	39,256
2010	114,629	21,633	16,549	-5,084	34,171	34,171
2013	117,621	22,172	25,464	3,292	38,739	37,464
2014	118,635	22,354	20,483	-1,871	36,868	35,592
2015	119,659	22,539	16,549	-5,990	30,878	29,603
2018	122,784	23,101	25,464	2,363	37,810	31,965
2019	123,844	23,292	20,483	-2,809	35,001	29,157
2020	124,913	23,484	16,549	-6,935	28,066	22,221
2023	128,177	24,072	25,464	1,392	36,839	23,613
2024	129,284	24,271	20,483	-3,788	33,051	19,825
2025	130,400	24,472	16,549	-7,923	25,128	11,902

Notes:

- ¹ Projected planning area population is from Table 4-3 with population estimates extrapolated to fit three multi dry years.
- ² Projected water demand is estimated population multiplied by 0.18 AF/capita based on 1994 - 2004 average post mandatory water conservation per capita use from Table 4-1 plus 1,000 AF/yr raw water demand.
- ³ Projected water supply reflects Total Source Capacity from Table 6-1 Multiple Dry Water Years plus the New Saticoy Well #3 (Ref. Table 6-3). Additionally, 2010 forward reflects Fox Canyon GMA Extraction Requirements (Ref. Table 3-2)
- ⁴ Each consecutive three year period reflects a standalone snapshot over the next twenty years ending in five year increments. Assumes only one of the three-year drought periods occur. For example if a drought occurred in 2013 through 2015 it is assumed that banked GMA credits would be available to support the water demand delta. As of December 2004, the City's banked groundwater was 35,447 a/f.

Notes (continued)

⁵ Reflects a cumulative reduction of banked groundwater for each five year period over the next twenty years. This assumes four (4), three-year drought periods occur in the next twenty years. In this example the use of banked GMA credits would reduce our reserve but allow the City to meet its treated water demand over the next twenty years.

6.4 - Rationing Stages and Reduction Goals

The City has developed a five-stage water shortage plan that would include voluntary and mandatory stages. The stages are intended to be fair to all water customers with the minimum impact on business, employment and quality of life. The water shortage stages and the reduction goals for each stage are outlined in Table 6-5.

Table 6-5
Water Shortage Stages And Reduction Goals

Shortage	Stage	Demand Reduction Goal	Program Type
Up to 10%	Stage 1	10% reduction	Voluntary
10-15%	Stage 2	15% reduction	Mandatory
15-20%	Stage 3	20% reduction	Mandatory
20-30%	Stage 4	30% reduction	Mandatory
30-50%+	Stage 5	50%+ reduction	Mandatory

At each of the five stages of action the City, the Utilities Division and City water customers each have certain actions they must undertake. Public agency actions involve increasing public awareness and education, adopting ordinances prohibiting water waste and establishing mandatory water conservation regulations, and periodically reviewing triggering levels. Water customer actions involve implementing water conservation measures and complying with water conservation ordinances.

In addition to its continuing water conservation efforts, the City implemented a Toilet Rebate Program and the Water Demand Reduction Offset Program (Water DROP) during the mandatory conservation period (1990-1993). Through the City's Toilet Rebate Program, a water customer received \$80 for replacing each 5 gallon per flush or larger toilet with an ultra low volume toilet. The Water DROP program is designed to promote both economic vitality and water use efficiency. New non-residential construction, additions, or alterations are now allowed if the developer offsets their increased water demand at a 3:1 ratio through retrofitting. A 2:1 ratio is required for residential projects. With the lifting of mandatory water conservation these programs have been discontinued. However, future drought conditions could reactivate these programs once more.

Significant measures of the five-stage water shortage plan include:

Stage 1: 0-10 Percent Reduction Goal (Voluntary)

Public Agency Actions

- Monitor conservation levels and increase public awareness.
- Notify customers of shortage conditions and disseminate literature.
- Publish customer use goals.
- Identify Water Shortage Contingency Plan stages and the possible actions per stage.
- Distribute water conservation brochures, information, and conservation kits.
- Conduct exterior and interior water audits upon customer requests.
- Request voluntary water consumption reduction.
- Maintain tiered rate structure to promote water conservation.
- Establish/enforce water waste ordinance.
- Establish/enforce ordinance prohibiting watering from 9 am to 6 pm.

Water Customer Actions

- Monitor own meter for usage.
- Implement conservation measures to reduce usage.
- Comply with water waste ordinance.
- Comply with prohibited watering during 9 am to 6 pm.

Stage 2: 10-15 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage):

- Initiate Mandatory Water Conservation Regulations of Ordinance No. 92-07.
- Enforce mandatory water consumption goals and allocations for all customers.
- Enact water rate surcharge for water consumption over customer allocation. Water in excess of allocation is billed at four times the City's highest water rate. For the third consecutive excessive bill, surcharge rate is ten times the City's highest water rate. Beyond a third billing period, restrictors placed on meters, at the customer's expense.
- Enactment of allocation adjustment and penalty review programs. Customers can apply for an allocation adjustment for the reasons specified in ordinance.
- Customers may appeal in writing for a waiver of penalties incurred due to a leak or break, incorrect allocation or hardship.

Water Customer Actions (In addition to actions established in previous Stage):

- Comply with mandatory water conservation regulations.

- All water customers requesting an increase in their water allocation must undergo a water audit and install water efficient plumbing fixtures for all fixtures at their business or residence.

Stage 3: 15-20 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation guidelines.

Stage 4: 20-30 Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation guidelines.

Stage 5: 30-50+ Percent Reduction Goal (Mandatory)

Public Agency Actions (In addition to actions established in previous Stage)

- Initiate Mandatory Water Conservation Regulations as an Ordinance.
- Establish and enforce mandatory water consumption goals and allocations for all customers.
- All water use not required for health and safety is prohibited.

Water Customer Actions (In addition to actions established in previous Stage)

- Comply with mandatory water conservation regulations
- Prohibition of all outside water use unless necessary for the preservation of health and safety and the public welfare.
- Watering with hand-held five gallon maximum bucket, filled at exterior hose bib or interior faucet (not by hose) shall be allowed at any time. This will assist in preserving vegetable gardens or fruit trees. Outdoor use of bath water,

dishwater, and laundry water for irrigation purposes is encouraged to the extent this practice is allowed under local health and safety regulations.

- The filling, refilling or adding of water to swimming and/or wading pools is prohibited.
- The operation of any ornamental fountain or similar structure is prohibited.

6.5 - Priority by Use

The following priorities for use of available water, based on California Water Code Chapter 3 and community input were used in establishing consumption limits. In order of preference they are:

1. Health and Safety - interior residential and fire fighting.
2. Commercial, Industrial and Governmental Uses - maintain jobs and economic base.
3. Permanent Crops - takes five to ten years to replace.
4. Annual Crops - protect jobs.
5. Existing Landscaping - especially trees and shrubs.
6. New Demand - projects without permits when shortage declared.

6.6 - Health and Safety Requirements

Based on commonly accepted estimates of interior residential water use in the United States, Table 6-6 indicates per capita health and safety water requirements.

Table 6-6

Typical Health and Safety Water Pre Capita Quantity Calculations

	Non-Conserving Fixtures	Habit Changes ¹	Conserving Fixtures ²
Toilets	5 flushes x 5.5 gpf 27.5	3 flushes x 5.5 gpf 16.5	5 flushes x 1.5 gpf 7.5
Shower	5 min x 4.0 gpm 20.0	4 min x 4.0 gpm 16.0	5 min x 2.0 gpm 10.0
Washer	12.5 gpcd 12.5	11.5 gpcd 11.5	11.5 gpcd 11.5
Kitchen	4 gpcd 4.0	4 gpcd 4.0	4 gpcd 4.0
Other	4 gpcd 4.0	4 gpcd 4.0	4 gpcd 4.0
Total (gpcd)	68.0	52.0	37.0
HCF per capita per year	33	25	18

¹ Reduced shower use results from shorter showers or reduced flow. Reduced washer use results from fuller loads.

² Fixtures include ULF 1.6 gpf toilets, 2.0 gpm showerheads and efficient clothes washers.

6.7 - Water Shortage Stages and Triggering Mechanisms

The “Water Shortage Contingency Plan” is designed to reduce demands up to a minimum of 50 percent of normal supply during a severe or extended water shortage. Water shortage triggering levels are established to ensure that the policy statements are implemented. Two types of triggers are discussed: 1). Triggers that would elicit a short term water supply response (i.e., voluntary or mandatory water conservation program, emergency water connections, etc.) and 2). Triggers that would trigger a long-term water supply response (i.e., seawater desalination facility, imported water, etc.).

The specific criteria for triggering the City’s water shortage stages are listed in Table 6-7.

Table 6-7
Water Supply Triggering Levels - Short Term

Stage	Percent Shortage	Total Water Supply Shortage	Peak Day Shortage (Current Year)
Stage 1	Up to 10% supply reduction current year, 15% second year, 30% third year, or 50% fourth year	Combined supply reductions totaling up to 2,400 AFY	Up to 4 MGD
Stage 2	10 to 15% supply reduction current year, 30% second year, or 50% third year	Combined supply reduction totaling between 2,401 to 3,600 AFY	4.1-6 MGD
Stage 3	15 to 20% supply reduction current year	Combined supply reduction totaling between 3,601 to 4,800 AFY	6.1-8 MGD
Stage 4	20 to 30% supply reduction current year, or 50% second year	Combined supply reductions totaling between 4,801 to 7,200 AFY	8.1-12 MGD
Stage 5	30 to 50% + supply reduction current year	Combined supply reductions totaling 7,201 AFY or more	More than 12 MGD

If the predicted shortage is in total water supply sources for the current year or subsequent years, the appropriate stage allocation program should be in effect year round. For shortages limited to peak demand days, the City council has the option of limiting the allocation program to the six months from May to October.

In the event of an emergency, the City Manager has the ability to make and issue rules and regulations on matters reasonably related to the protection of life and property as affected by the emergency (Section 5313.2 of City Ordinance Code). The City has developed the Principles and Guidelines for Emergency Water Ordinance to provide guidance during an emergency that severely impacts the City's water supply (see Appendix D). The emergency water ordinance outlines the manner in which water services during emergency conditions will be distributed to all the City customers in a fair and equitable manner.

With respect to long-term "triggering levels," technical studies and evaluations completed in 1994 by Boyle Engineering Corporation, have provided valuable information concerning the City's immediate and long-term supplemental water supply needs. The evaluation of projected water supplies and demands concluded that the City will not need a long-term base-loaded supplemental water supply for at least fifteen (15) more years. It should be noted that the City is currently updating the Water Master Plan and an update to this evaluation is expected in 2006.

The City currently has a monitoring program to provide roughly five year's advance warning of the need for a supplemental water supply, whether the need be for drought-proofing or for long term base-loaded supply. This will give the City sufficient time to fully implement a supplemental water supply project, from the feasibility study phase to completion of construction and start up of the facility. This program includes a biennial report, provided to the City council, of our water supply conditions. The water supply conditions which will be reviewed include the production from the Ventura River, the storage level in Lake Casitas, the City's balance in the Fox Canyon GMA groundwater bank, the status of the City's other groundwater basins, and water demand within the City.

In addition to the short term water supply triggers described above, the City's long term water supply will be evaluated using the following triggers:

1. Ventura River - the previous year's water production from the Ventura River was less than 2,500 AF.
2. Lake Casitas - the storage in the lake reaches the 95,000 AF Stage 2 level.
3. Fox Canyon GMA Bank - the City's balance in the fox Canyon GMA groundwater bank falls below 10,000 AF.
4. Other Groundwater Basins - conditions in the Mound and Santa Paula groundwater basins begin to deteriorate significantly.
5. Water Demand - the water demand within the City reaches 27,500 AFY.

The triggers for a drought-proofing supplemental water supply, based on the condition of the Ventura River, Lake Casitas, the Fox Canyon GMA bank, and the groundwater basins, should be considered together. It is suggested that if any two of the first four triggers identified above are reached, then the decision making process for implementation of a supplemental water supply project should begin.

The water demand trigger for a long-term base-loaded supplemental water supply, the fifth trigger, should be considered independently of the drought-proofing triggers. Reaching the water demand trigger would also begin the decision making process for implementation of a supplemental water supply project regardless of the condition of the City's existing water supplies. The City Council's decision-making process to select either seawater desalination, importing SWP water or another alternative will focus on the actual circumstances at that future time. Currently, our projected water demand for 2025 is 24,472 A/F.

6.8 - Water Allotment Methods

The City has established the following customer classifications and the allocation method for each classification:

- | | |
|-----------------|---|
| • Single Family | -Hybird of Per-capita Allocation and Percentage Reduction |
| • Multi-Family | -Hybird of Per-capita Allocation and Percentage Reduction |
| • Commercial | -Percentage Reduction |
| • Industrial | -Percentage Reduction |
| • Firelines | -No Reduction |
| • Temporary | -No Reduction |
| • Municipal | -Percentage Reduction |
| • Schools | -Percentage Reduction |
| • Churches | -Percentage Reduction |
| • Unaccounted | -No Reduction |
| • New Demand | -Per-capita Allocation |

Each customer will be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers and connections will be notified at the time service commences. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. A customer has the option to appeal the Utilities Business Manager's classification or allotment of their account. Appeals shall be processed as set forth in the established Mandatory Water Conservation Regulations.

6.9 - Potable Water Allocations by Priority and Shortage Stage

The City's established potable water allocations are summarized as follows:

- | | |
|---------------------------------|---|
| • Single Family Residences | -32 HCF/billing period(2 mos) or 392 gpd/du |
| • Multiple Family Residences | -20 HCF/unit/billing period or 245 gpd/du |
| • New non-residential landscape | - Less than historical less 10% |
| • Municipal/School | - Historical less 15% |
| • Irrigation | - Historical less 25% |

Mandatory conservation during the drought was terminated June 28, 1993.

6.10 - Rate Structure Under Rationing

Based on fiscal year 2005-2006 water rates and budgeting, Table 6-8 was prepared. The table illustrates the impact of water sales only.

Table 6-8

Water Shortage Contingency Plan
Impact of Water Sales Reductions Based on Conservation Stages

	Base Conservation		Stage 1 @ 10%		Stage 2 @ 15%		Stage 3 @ 20%		Stage 4 @ 30%		Stage 5 @ 50%	
	Estimated Consumption HCF/YR	Estimated Revenue \$/s/YR	Estimated Consumption HCF/Yr	Estimated Revenue \$/s/YR	Estimated Consumption HCF/Yr	Estimated Revenue \$/s/YR	Estimated Consumption HCF/Yr	Estimated Revenue \$/s/YR	Estimated Consumption HCF/Yr	Estimated Revenue \$/s/YR	Estimated Consumption HCF/Yr	Estimated Revenue \$/s/YR
Customer Class												
Single Family Residential	3,403,945	\$6,400,186	3,063,551	\$5,760,167	2,893,353	\$5,440,158	2,723,156	\$5,120,149	2,382,762	\$4,480,130	1,701,973	\$3,200,093
Multi Family Residential	1,840,719	\$3,334,514	1,656,647	\$3,001,063	1,564,611	\$2,834,337	1,472,575	\$2,667,611	1,288,503	\$2,334,160	920,359	\$1,667,257
Commercial	1,711,903	\$3,850,400	1,540,713	\$3,465,360	1,455,118	\$3,272,840	1,369,523	\$3,080,320	1,198,332	\$2,695,280	855,952	\$1,925,200
Industrial	48,007	\$101,500	43,206	\$91,350	40,806	\$86,275	38,405	\$81,200	33,605	\$71,050	24,003	\$50,750
Municipal, Building	16,114	\$34,000	14,502	\$30,600	13,697	\$28,900	12,891	\$27,200	11,280	\$23,800	8,057	\$17,000
Schools	191,943	\$405,000	172,749	\$364,500	163,152	\$344,250	153,555	\$324,000	134,360	\$283,500	95,972	\$202,500
Church	30,420	\$65,300	27,378	\$58,770	25,857	\$55,505	24,336	\$52,240	21,294	\$45,710	15,210	\$32,650
Subtotal	7,243,051	\$14,190,900	6,518,746	\$12,771,810	6,156,593	\$12,062,265	5,794,440	\$11,352,720	5,070,135	\$9,933,630	3,621,525	\$7,095,450
Constants												
Firelines		\$228,500		\$228,500		\$228,500		\$228,500		\$228,500		\$228,500
Temporary	24,171	\$51,000	24,171	\$51,000	24,171	\$51,000	24,171	\$51,000	24,171	\$51,000	24,171	\$51,000
Irrigation, agriculture	44,144	\$49,000	44,144	\$49,000	44,144	\$49,000	44,144	\$49,000	44,144	\$49,000	44,144	\$49,000
Ground Water, Oil Recovery	362,883	\$402,800	362,883	\$402,800	362,883	\$402,800	362,883	\$402,800	362,883	\$402,800	362,883	\$402,800
Subtotal	431,198	\$731,300	431,198	\$731,300	431,198	\$731,300	431,198	\$731,300	431,198	\$731,300	431,198	\$731,300
Grand Total	7,674,248	\$14,922,200	6,949,943	\$13,503,110	6,587,791	\$12,793,565	6,225,638	\$12,084,020	5,501,333	\$10,664,930	4,052,723	\$7,826,750

Table 6-9
Water Shortage Contingency Plan

Projected Range of Water Sales by Conservation Stages

	Cons Base 0%	Stage 1 10%	Stage 2 15%	Stage 3 20%	Stage 4 30%	Stage 5 50%
#HCF	7,674,248	6,949,943	6,587,791	6,225,638	5,501,333	4,052,723
#AF	17,616	15,954	15,122	14,291	12,628	9,303

Revenue & Expenditure @ Conservation Stages

Operating Revenues	Cons Base 0%	Stage 1 10%	Stage 2 15%	Stage 3 20%	Stage 4 30%	Stage 5 50%
Total Water Sales	\$14,922,200	\$13,503,110	\$12,793,565	\$12,084,020	\$10,664,930	\$7,826,750
Total Meter Service Chg	2,152,000	2,152,000	2,152,000	2,152,000	2,152,000	2,152,000
Subtotal Wtr & Mtr Chg	\$17,074,200	\$15,655,110	\$14,945,565	\$14,236,020	\$12,816,930	\$9,978,750
Total Other Revenue	457,000	457,000	457,000	457,000	457,000	457,000
Total Internal Transfer	658,408	658,408	658,408	658,408	658,408	658,408
Grand Total Revenue	\$18,189,608	\$16,770,518	\$16,060,973	\$15,351,428	\$13,932,338	\$11,094,158
% Reduction of Revenue		7.80%	11.70%	15.60%	23.40%	39.01%
Operating Expenses						
Debt & Depreciation	\$4,937,465	\$4,937,465	\$4,937,465	\$4,937,465	\$4,937,465	\$4,937,465
Utility Billing	500,151	500,151	500,151	500,151	500,151	500,151
Utilities Administration	1,693,262	1,693,262	1,693,262	1,693,262	1,693,262	1,693,262
Water Administration	2,340,811	2,340,811	2,340,811	2,340,811	2,340,811	2,340,811
Water Distribution	1,961,101	1,961,101	1,961,101	1,961,101	1,961,101	1,961,101
Water Production	3,253,802	3,253,802	3,253,802	3,253,802	3,253,802	3,253,802
Water Purification	3,103,016	3,103,016	3,103,016	3,103,016	3,103,016	3,103,016
Water Contingency	400,000	400,000	400,000	400,000	400,000	400,000
Total Expenses	\$18,189,608	\$18,189,608	\$18,189,608	\$18,189,608	\$18,189,608	\$18,189,608
Dollar Deficient	\$0	-\$1,419,090	-\$2,128,635	-\$2,838,180	-\$4,257,270	-\$7,095,450
% Deficient		-7.80%	-11.70%	-15.60%	-23.40%	-39.01%

Table 6-9 further identifies revenue impacts due to reduced water sales. The table indicates that without reduced water sales, the commodity or variable portion of the revenue is about 82 percent of total revenue (\$14,900,000 ÷ \$18,200,000). The remaining revenue is from meter charges (i.e., fixed bi-monthly charges) and from internal revenue and other sources. Under the 50 percent reduced sales scenario, the commodity revenue is 70 percent of total revenue.

Table 6-10 is a summary of water and meter charge sales. The reduced revenue is in all cases less than the percentage water reduction due to the fixed portion of water revenue, i.e., that portion of revenue not impacted by water sales.

Table 6-10
Water Sales and Meter Charge
Revenue Impacts of Water Conservation

Stage	% Conservation	Revenue \$ (millions)	Incremental Reduction \$ (millions)	Incremental Reduction %	Cumulative Reduction %
-	0	17.1	-	-	-
1	10	15.7	1.4	8.2	8.2
2	15	14.9	0.8	5.1	13.3
3	20	14.2	0.7	4.7	18.0
4	30	12.8	1.4	9.9	27.9
5	50	10.0	2.8	21.9	49.8

On the expense side, the major categories (without decreases as a result of decreases in sales) are summarized in Table 6-11. This information is based on fiscal year 2005-2006 budgetary numbers.

Table 6-11
Water System Expenses

Category	Amount
Debt & Depreciation	\$4,937,465
Utility Billing	500,151
Utilities Administration	1,693,262
Water Administration	2,340,811
Water Distribution	1,961,101
Water Production	3,253,802
Water Purification	3,103,016
Water Contingency	400,000
TOTAL	\$18,189,608

From Table 6-11, the following observations are made:

1. The debt and depreciation is the largest single program expenditure (although salaries are the largest expense item). Of the \$5.0 million, approximately 29 percent is for depreciation (funded for replacements) and the remainder is to fund the City's aggressive capital improvement program and to pay off existing bond payments (latter is about \$3,500,000). This includes \$750,000 per year taken from water sales revenue. Should there be a significant shortfall in revenue, this is one category where short-term reductions could be made. Long-term reductions should not be considered if the City is to construct and maintain a quality system.
2. "Water Production" includes about \$1,285,000 for electricity and \$270,600 for ground water extraction out of about \$3,254,000. Those two items should be somewhat proportional to water sales i.e., a 50 percent reduction in sales may reduce the expenditures by perhaps \$700,000 to \$800,000.
3. "Water Purification" could experience some reduction with reduced sales (i.e., in electricity, chemicals and water purchases, which are about \$80,000, \$192,000 and \$1,800,000 respectively). Of course, if the shift during a drought is to more groundwater, treatment costs could actually increase. This would imply:
 - Higher pumping costs to the City.
 - Reduction in cost of purchased water.
 - Reduction in chemical cost to treat surface water.

Overall, Table 6-12 approximates the impact of the Five-Stage Water Shortage Plan with expense reductions to electricity and water purchases.

Table 6-12

Overall Summary of Five-Stage Water Shortage Plan

Stage	Water Conservation	Revenue Reduction ¹	Expense Reduction ²	Shortfall
1	10%	8%	1.5%	\$1.1 million
2	10%	12%	2.3%	\$1.7 million
3	20%	16%	3.1%	\$2.3 million
4	30%	23%	4.7%	\$3.4 million
5	50%	39%	7.8%	\$5.7 million

Notes:

¹ From Table 6-9

² Without decreasing capital program - very approximate.

The above table is very simplified since drought changes can result in shifts in water sources with impacts on costs. However, it does, in the broad sense, illustrate the types of and order of magnitude of impacts of reduced sales. Shortfalls in a water enterprise fund can typically be met by:

- Use of reserve funds (the City's reserve funds are significant and planned for needed capital facilities).
- Deferral of capital expenditures.
- Deferral of maintenance items.
- Rate increases.
- Shift water sources to less costly water (if possible).

In the City's case, a reduction in water revenue could, theoretically, be mitigated substantially through deferral or avoidance of capital fund expenditures. This would meet short-term cash flow needs, although it should only be considered on a short-term basis. Rate adjustments could also be employed either solely or in conjunction with capital expenditure reductions.

6.11 - Mandatory Prohibitions on Water Wasting

In April 1989, the City adopted Ordinance 89-6 prohibiting water waste (see Appendix D). The ordinance defined prohibited activities and the penalties to be imposed for violations.

6.12 - Mechanism to Evaluate Effectiveness

Certain aspects of water conservation can be monitored and evaluated easily. An example is metered reclaimed water. Other aspects such as public education, are more difficult to measure in terms of effectiveness; in this case, for example, the benefit is in:

Weather patterns make it more difficult to compare one year's results with another. This can be offset by multi-year analyses, using averages and trends.

General public perceptions and attitudes change as a result of programs by other water suppliers outside the City. Certainly there are programs by Metropolitan Water District, and, indirectly, by organizations such as Southern California Gas Company and Southern California Edison which reinforce the overall conservation theme.

Known conservation programs which are seriously pursued positively by the City tend to impact customer usage. Historically, during drought periods there are countless examples of public cooperation. The City's reduced demand is an excellent example. There also is the permanent impact of mandated programs such as water conserving plumbing fixtures, which result in conservation even if the public is not aware of them.

When severe shortages occur and some degree of rationing is required, a program's effectiveness can be judged directly by water billings. In these cases, targeted results must be met and even reluctant customers will, on the whole, meet the goals.

Specific methods to evaluate effectiveness of water conservation programs to be employed by the City are:

- Metering of a Reclaimed Water Usage. This will determine how much has been used.
- Monitoring Production Quantities. In normal water supply conditions, production figures are recorded daily by automation. The production supervisor and the production leadworker monitor the accuracy of the monthly production totals. The totals are incorporated into the monthly water supply report to the State Department of Health Services by the treatment supervisor.

During a Stage 1 or 2 water shortage, daily production figures are recorded. To verify that the reduction goal is being met, the weekly production and the target weekly production are forwarded to the Water Superintendent and the Utilities Manager.

Monthly reports are sent to the Public Works Director. If reduction goals are not met, the City Manager will notify the City Council so that corrective action can be taken.

During a Stage 3 or 4 water shortage, the procedure listed above will be followed, with the addition of a daily production report to the Water Superintendent.

During a disaster shortage, production figures will be reported hourly to the Water Superintendent, with the addition of a daily production report to the Utilities Manager. Weekly reports will also be provided to the Public Works Director and City Manager.

- Compiling annual statistics to track usage of customer groups to determine trends within those groups. This is currently being done through the water billing computer system. As stated above, a multi-year examination will aid in reducing the impact of weather patterns as a variable.
- Evaluation of the impact of low-use plumbing fixtures in new construction or retrofitted units. This can be done by multiplying the average usage with and without such fixtures versus low-use fixtures by the number of units.
- Comparing irrigation meter readings. For City parks and other landscaped areas, meter readings can be compared and analyzed to determine the effectiveness of irrigation programs, or landscape materials.

Section 7 - Water Recycling

7.1 - Wastewater System Description

The City of Ventura provides wastewater collection and treatment for the City, for McGrath State Beach Park, and for the North Coast Communities (Ventura County Service Area 29).

Wastewater collection and treatment facilities are operated by the Wastewater Section, which along with the Water Section comprises the Utilities Division of the Public Works Department. Wastewater facilities include 475 miles of sewer mains, 12 lift stations and the Ventura Water Reclamation Facility, a tertiary treatment plant.

7.2 - Water Reuse Association Membership

The City is an active member of the California Water Reuse Association, which helps implement water recycling in California. The City has developed its own water recycling plan for the surrounding service area.

7.3 - Wastewater Generation, Collection and Treatment

The City first provided a municipal sewer system more than a century ago. In 1888 this system extended from Crimea Street west to the Ventura River and from the Pacific Ocean north to Ramona Street. The City later built and operated a primary treatment facility that included an ocean outfall at the foot of Figueroa Street between 1948 and 1972. At that time the outfall was abandoned and the treatment plant replaced with a pump station, which delivered all wastewater flow from the western portion of Ventura through a 3-mile force main to the Ventura Water Reclamation Facility (VWRF).

The VWRF, at 1400 Spinnaker Drive, was constructed in 1958 as a 4 million gallons per day (mgd) secondary treatment facility utilizing trickling filters. The facility is located on the north bank of and discharges treated effluent to the Santa Clara River Estuary. The facility has provided reclaimed water since the 1960's to the City owned Olivas Park Municipal Golf Course approximately one-quarter mile east of the treatment plant.

In 1972 the facility was expanded with the addition of a 10-mgd Activated Sludge treatment process bringing the nominal combined secondary process capacity to 14 mgd. At that time tertiary filters were also constructed to provide filtered effluent for both reclamation and discharge to the Santa Clara River Estuary.

Subsequent facility construction projects have added solids treatment, improved chloramine contact and expanded reclamation pumping and distribution facilities.

Processes currently employed at the treatment facility include screening, grit removal, primary sedimentation, primary flow equalization, roughing filters, activated sludge secondary biological treatment, tertiary effluent filtration and Chloramination.

NPDES permit CA0053651, issued by the Los Angeles Regional Water Quality Control Board as Order 95-074 regulates discharge of reclaimed water to the Santa Clara Tidal Prism.

Reuse of effluent for irrigation is regulated by Los Angeles Regional Water Quality Control Board Order 87-45. Process solids currently are treated by anaerobic digestion, dewatered and applied to agricultural land at River Island Farm near Wasco, California.

Historical and projected wastewater collected and treated is reflected in Table 7-1.

Table 7-1

Wastewater Collected and Treated - Acre-feet per Year

	2000	2005	2010	2015	2020	2025
Wastewater collected & treated in service area	10,570	9,762	10,537	11,312	12,087	12,862
Quantity that meets recycled water standard	100%	100%	100%	100%	100%	100%

Following disinfection, the effluent enters a system of Wildlife Ponds with a combined capacity of 34 million gallons. At the current average daily outfall flow rate of 9.1 MGD, this provides approximately 4 days of detention.

7.4 - Wastewater Disposal and Recycled Water Uses

The City's wastewater facilities include pump stations and pipelines for water reclamation. The effluent reuse system provides effluent for irrigation of golf courses, parks and similar landscape areas. This reuse is an integral part of the city water conservation program and represents a reduction in demand on the potable water supply each year of approximately 325 million gallons. The table below reflects our current and projected recycled water uses. Recycled uses do not include water lost to the ground during storage. These losses are estimated at 1,428 AF/Y.

Table 7-2

Recycled Water Uses Projection

Type of Use	Treatment Level	2005 AF/Y	2010 AF/Y	2015 AF/Y	2020 AF/Y	2025 AF/Y
Landscape	Tertiary	871	1,646	2,421	3,196	3,971
Wetlands	Tertiary	7,463	7,463	7,463	7,463	7,463

The NPDES permit for the Wastewater Reclamation Facility mandates that an average of no less than 5.6 MGD of reclaimed water be provided to the estuary of the Santa Clara River for support and enhancement of the estuarine habitat. The quantities of reclaimed water currently delivered represent approximately 50% of the tertiary effluent available above the mandated estuary discharge volume and losses to the ground from storage ponds.

Reclaimed water for irrigation and for discharge to the estuary of the Santa Clara River is withdrawn from the end of the wildlife pond system. Reclaimed water for irrigation is pumped by two pump stations into 3 distribution lines.

Residence in these ponds provides substantial dissipation of Chloramine residual and a corresponding reduction in the cost of dechloramine chemicals needed to meet the requirement for complete Chloramine neutralization prior to discharge to the estuary of the Santa Clara River. Chloramine dissipation also reduces the risk of landscape damage from high Chloramine concentrations in water supplied for irrigation.

Additionally the reservoir capacity of the wildlife ponds serves as a safeguard against the use of effluent of unacceptable quality for irrigation of parkland, where significant public exposure may occur. The pond detention time allows completion of analysis necessary to assure the safety of the irrigation supply before that water would reach the point of irrigation withdrawal.

7.5 - Encouraging Recycled Water Use

In 1990 the City Council adopted a policy on reclaimed water use mandating that all new commercial development located near existing reclaimed water distribution systems must install a dual water system to allow the use of reclaimed water for landscape irrigation. To date one project, the Los Angeles Times Offices for Ventura County, has connected under this policy.

In addition the City has adopted the California Urban Water Conservation Council's "Memorandum of Understanding Regarding Urban Water Conservation in California." This memorandum of understanding includes a commitment to wastewater reclamation ... "wherever technically and economically feasible..."

7.6 - Recycled Water Optimization Plan

In 1992 the City commissioned a Reclaimed Water Master Plan to guide future expansion of reclaimed water service. This Master Plan, prepared by Black and Veatch, recommends pursuit of landscape irrigation opportunities adjacent to or within reasonable distances of existing reclaimed water distribution systems. Reclaimed water uses for agricultural applications are not recommended because of reclaimed water mineral quality limitations. Within the technical and economic limitations defined, the following potential reclaimed water uses were identified in the master plan:

Table 7-3

Projected Demands of Existing and Potential Near-Term Markets

Market	Market ID No.	Existing Source of Supply	Average Annual Demand [mgd, (AFY)]	Maximum Day Demand [mgd]
Existing				
Olivas Park Golf Course	1	Reclaimed	0.543 (608)	1.262
Buenaventura Mun Golf Course	5	Reclaimed	0.247 (277)	0.665
Marina Park	3	Reclaimed	0.015 (17)	0.042
Olivas Adobe Hist. Monument	4	Reclaimed	0.005 (6)	0.102
Harbortown Landscaping	2	Reclaimed	0.002 (2)	0.015
Subtotal			0.81 (907)	2.09
Near Term				
River Ridge Golf Course	7	GMA	0.500 (560)	1.400
United Foods, Inc.	6	Potable	0.187 (209)	0.524
Ventura County Fairgrounds	42	Potable	0.147 (165)	0.421
Bailard Landfill	9	GMA	0.126 (141)	0.353
Ivy Lawn Cemetery	45	Mound	0.120 (134)	0.336
Ventura Coastal	43	Potable	0.080 (90)	0.224
Polo Grounds	46	Mound	0.062 (69)	0.174
Hofer and Swift Development	14	Potable	0.052 (58)	0.146
Coastal Landfill	8	GMA	0.038 (43)	0.106
Ventura Marina MHP Office Landscaping	11	Potable	0.030 (34)	0.084
Caltrans Landscaping (101)	55	Potable	0.028 (31)	0.078
Ocean Avenue Park	44	Potable	0.024 (27)	0.067
Ventura Auto Ctr. Landscaping	13	Potable	0.012 (13)	0.034
San Buenaventura Business Ctr.	47	Mound	0.009 (10)	0.025
Arundell Linear Park	17	Potable	0.009 (10)	0.025
Trammell Crow	48	Mound	0.008 (9)	0.022
Ventura West Marina Landscaping	10	Potable	0.006 (7)	0.017
Pierpont Elementary School	12	Potable	0.005 (6)	0.014
Block and Co., Inc. Landscaping	15	Potable	0.004 (5)	0.011
Telephone Plaza	49	Mound	0.003 (3)	0.008
Top 10 Properties	16	Potable	0.002 (2)	0.006
Subtotal			1.45 (1,626)	4.07
Potable			0.586 (657)	1.64
GMA			0.664 (744)	1.86
Mound			0.202 (225)	0.57
Total			2.26	6.16

Table 7-4

Potential Long-Term Markets at Existing Effluent Quality

Market	Market ID No.	Existing Source of Supply	Average Annual demand [mgd, (AFY)]	Maximum Day Demand [mgd]
Ventura County Govt. Center	27	Mound	0.105 (118)	0.294
Ventura Community College	34	Potable	0.079 (89)	0.221
Turtle Creek HOA	22	Potable	0.072 (81)	0.202
Camino Real Park	19	Potable	0.060 (67)	0.168
Caltrans Landscaping (126)	21	Potable	0.058 (65)	0.162
Buena High School	32	Potable	0.041 (46)	0.115
Arroyo Verde Park	33	Potable	0.040 (45)	0.112
Ventura High School	39	Potable	0.030 (34)	0.084
Balboa Middle School	30	Potable	0.017 (19)	0.048
Cabrillo Middle School	50	Potable	0.016 (18)	0.045
Mar Vista High School	18	Potable	0.016 (18)	0.045
County Sq. & Ralston Village Linear Park	25	Potable	0.014 (16)	0.039
Anacapa Middle School	35	Potable	0.013 (15)	0.036
Ventura Del Sol	31	Potable	0.012 (13)	0.034
Elmhurst Elementary	20	Potable	0.011 (12)	0.031
Memorial Park	51	Potable	0.010 (11)	0.028
Marion Cannon Park	23	Potable	0.010 (11)	0.028
Buenaventura Plaza	36	Potable	0.009 (10)	0.025
Webster Linear Park	28	Potable	0.009 (10)	0.025
Loma Vista Elementary	37	Potable	0.008 (9)	0.022
Will Rogers Elementary	40	Potable	0.008 (9)	0.022
Victoria Village	24	Potable	0.008 (9)	0.022
Mound Elementary	29	Potable	0.006 (7)	0.017
St. Bonaventure High School	38	Potable	0.005 (6)	0.014
Mission Park	52	Potable	0.004 (5)	0.011
Blanche Reynolds Park	41	Potable	0.003 (3)	0.008
County Square Building	26	Potable	0.003 (3)	0.008
Lincoln Elementary	53	Potable	0.001 (1)	0.003
Washington Elementary	54	Potable	0.001 (1)	0.003
Total			0.670 (750)	1.876
Potable			0.565 (632)	1.582
GMA			0.000 (0)	0.000
Mound			0.105 (118)	0.294

This strategy for expansion of reclaimed water use recognizes the economic and technical limitations of market development and promotes the growth of uses within the limitations of the mandated estuary discharge volumes.

Potential quantities of reclaimed water available from the Reclaimed Water Master Plan (adjusted for actual flows and losses where appropriate) are:

Year	Actual (or Projected) Wastewater Flow	Available for Reclamation (after losses and estuary)	Actual Reclaimed Water Uses	Projected Reclaimed Water Market ¹
1990	8.51 MGD	1.91 MGD	.84 MGD	
1995	8.40 MGD	1.80 MGD	.58 MGD	
1999	9.08 MGD	2.48 MGD	.90 MGD	
2000	9.30 MGD	2.70 MGD	.92 MGD	2.26 MGD
2010	13.00 MGD	6.4 MGD		2.26 MGD
2020	14.30 MGD	7.7 MGD		2.26 MGD
2040	16.90 MGD	10.3 MGD		2.93 MGD

¹ "Master Plan for Reclaimed Water System," Black and Veatch, 1992

In July 1999 the City reviewed the recommended improvements in the 1992 Mater Plan. It was noted that the recommended improvements were based on a number of assumptions such as the amount of available effluent and the potential use of reclaimed water by several large users. The City found that implementation of all the recommended improvements was not justified at that time because: (1) the amount of available effluent supply was less than anticipated; and (2) the proposed expansion of the golf courses currently using reclaimed water, would utilize most or all of the estimated available supply.

An analysis of the existing reclaimed water system was also completed at that time, to determine the recommendation for future expansion. Significant findings from the analysis were as follows:

- The available amount of reclaimed water supply is currently substantially less than the estimated amount per the Master Plan.
- The average maximum day demand for the entire system over the last three years is approximately 1 mgd.
- The current available supply of reclaimed water to customers above and beyond existing demands is approximately 1.2 mgd.
- Expansions of the golf courses currently using reclaimed water are scheduled to occur within the next two to four years. These expansions will use most or all of the estimated available supply.
- The current reclaimed water charges do not include enough revenue for expansion and/or upgrades to the existing reclaimed water system.

From the analysis the City Council adopted a policy for reclaimed water use. The policy allows the City to provide reclaimed water to new and existing potable water customers, thereby decreasing potable water demand. The City Council recognized that increased reclaimed water usage for landscape irrigation would assist the City in offsetting the need for an alternative water supply to meet future demands and would result in financial saving to its customers (Appendix F).

Appendix K

Phase I Environmental Site Assessment

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NO. 6652 P. 2

*Community Memorial Hospital- Report of Geotechnical Investigation
MACTEC Engineering and Consulting, Inc., Project 4953-08-0911*

August 21, 2008

EXECUTIVE SUMMARY

We have completed our geotechnical investigation of the site of the proposed hospital building and Cabrillo radiation oncology addition at the campus of Community Memorial Hospital in Ventura, California. Our subsurface explorations, engineering analyses, and foundation design recommendations are summarized below.

The soil and ground-water conditions beneath the proposed hospital building were explored by drilling five borings to a depth 90 feet below the existing grade and performing ten cone penetration tests (CPTs) to depths of 120 feet below the existing grade. Data were also available from numerous prior investigations at or near the site of proposed hospital building and proposed Cabrillo radiation oncology addition.

Fill soils, 3 to 5 feet thick, were encountered in the five current exploration borings. The fill soils consist of silty sand and sandy silt and are not uniformly well compacted. Deeper fill soils may be present between the borings. Ground-water was encountered at depths of approximately 29 to 30 feet below ground surface in our current borings. The historical high ground-water level has been taken to be 17 feet below grade.

Based on the available geologic data, active or potentially active faults with the potential for surface fault rupture are not known to be located beneath or projecting toward the site. In our opinion, the potential for surface rupture at the site due to fault plane displacement propagating to the ground surface during the design life of the project is considered low. Although the site could be subjected to strong ground shaking in the event of an earthquake, this hazard is common in Southern California and the effects of ground shaking can be mitigated by proper engineering design and construction in conformance with current building codes and engineering practices.

The site is relatively level and the absence of nearby slopes precludes slope stability hazards. The potential for liquefaction and seismic settlement at the site is high in the event of a moderate or strong earthquake on a nearby fault; however, the effects of liquefaction and seismic settlement will be mitigated if the foundation and grading recommendation presented in this report are followed. The potential for other geologic hazards such as tsunamis, inundation, seiches, flooding, and subsidence affecting the site is considered low.

Because of estimated liquefaction-induced settlement in the loose and medium dense soils encountered within the upper 90 feet, these soils are not considered suitable, in their current state for support of the proposed buildings on shallow spread footings. We recommend ground improvement be performed to mitigate liquefaction potential and allow the proposed buildings to be supported on spread footings, mat foundations, or short piles. Alternatively, the proposed buildings may be also supported on pile foundations. The proposed Cabrillo Radiation Oncology Addition could be supported on a mat foundation if it can be designed to accommodate anticipated settlement with respect to the adjacent grade.

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NO. 6652 P. 3



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PHASE I ENVIRONMENTAL SITE ASSESSMENT

**Community Memorial Hospital
Ventura Properties
Ventura, California 93003**

FCG Project # CMH-09

June 10, 2010

**Prepared for:
Community Memorial Hospital
147 North Brent Street
Ventura, CA 93003
c/o Mr. Ron Polito**

**Prepared by:
Alan Forbess, REA
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NO. 6652 P. 4

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June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

TABLE OF CONTENTS

1.0 SCOPE OF ASSESSMENT	1
2.0 SITE INFORMATION	4
3.0 SITE RECONNAISSANCE	9
4.0 RECORDS REVIEW	13
5.0 REGULATORY AGENCY DATABASE REVIEW	16
6.0 CONCLUSIONS AND RECOMMENDATIONS	20
7.0 QUALITY AND LIMITATIONS STATEMENT	22

TABLES

Table 1 – List of Site Locations and Descriptions	3
Table 2 – Site Addresses, Parcel Numbers, Size and Zoning	8
Table 3 – Surrounding Land Use	13
Table 4 – Aerial Photo Review	14

FIGURES

- Figure 1 – Site Location Map
- Figure 2 – Site Plan
- Figure 3 – Assessor's Parcel Maps

ATTACHMENTS

- 1 – Color Photographs of Site Inspection (taken 5-24-10)
- 2 – City of Ventura File Documents (Bldg. & Fire partial)
- 3 – County of Ventura Environmental Health Division Documents (partial)
- 4 – Phase II Environmental Assessment of 2900 Loma Vista (AET report dated 10/02)
- 5 – EDR Environmental Database Report Package
 - Includes: Aerial Photographs (1938-2005)
 - Historical Topographic Maps (1910-1967)
 - Sanborn Fire Insurance Maps (1950-1968)
 - City Directory Abstract (1926-2002)
 - EDR Radius Map with GeoCheck®
 - (Federal, State & Local Agency Database Review)

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NO. 6652 P. 5



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SITE ASSESSMENT****Community Memorial Hospital
147 N. Brent St. &
Associated Ventura Properties
Ventura, California 93003****June 10, 2010**

This report presents the results of a Phase I Environmental Site Assessment conducted for Community Memorial Hospital (CMH) and all associated hospital properties located in close proximity to the main hospital in Ventura, California. This report has been prepared for Community Memorial Hospital as part of a due diligence for proposed site redevelopment and expansion projects to identify potential environmental liabilities and land use history of the subject site(s).

1.0 Scope of Assessment

This report details the results of an investigation into previous and current land use to identify potential environmental concerns as revealed by a review of available public records, site reconnaissance, interviews with individuals associated with the properties and a review of historical documentation. This document complies with the ASTM Standard Practice for Environmental Site Assessments (E 1527-05).

Scope of Phase I Environmental Assessment: This assessment included the following tasks:

Site Reconnaissance: A site reconnaissance of the CMH property and associated properties was conducted by FCG staff on May 24, 2010. Services were performed by Alan Forbess, FCG's Principal Consultant and a California Registered Environmental Assessor (No. 06634); and Dana Stephens, M. S., FCG Staff Professional. The CMH Ventura properties were inspected for evidence of hazardous materials storage and usage, existing signs of contamination, hazardous waste generation, waste disposal activity, and similar environmental concerns. Surrounding land use was also identified for similar concerns which might impact the subject site. Color photographs were taken during the site reconnaissance and appear in Attachment 1.

Records Review: A review of readily available records and historical information was conducted to identify environmental concerns associated with previous and current land use and operations conducted at each of the subject site properties. Included in the background investigation was a review of the following sources:

Regulatory Agencies Contacted:

- City of Ventura Building & Safety Department (Attachment 2).
- City of Ventura Fire Department (Attachment 2).

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CMH8056439312

NO. 6652 P. 6

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June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

- County of Ventura Fire Department (Attachment 2).
- County of Ventura Environmental Health Division (Attachment 3).

Historical and Regulatory Information Search: Environmental Data Resources Inc. (EDR) was subcontracted to provide the following data research services. The complete EDR reports for each of the following are provided in the Attachments to this report.

- *Environmental Database of Listed Sites* - EDR reviewed regulatory agency databases for listed properties located within a one mile radius of the site. The EDR Database Search Report (EDR Radius Map with GeoCheck®) included a review of lists compiled by various federal, state, and local agencies. See Attachment 5 for a copy of the EDR database report.
- *Historical Map Search* - EDR currently maintains the Sanborn® Fire Insurance Map collection which provides valuable information regarding historical site use dating back to the early 1900's. EDR reviewed their historic map collection for coverage of the site. See Attachment 5 for a copy of Sanborn Fire Insurance Maps reviewed as part of this assessment.
- *Aerial Photography* - EDR provided copies of aerial photographs dating back to 1938 of the subject site and surrounding area. See Attachment 5 for copies of all aerial photographs collected and reviewed as part of this survey.
- *Historical Topographic Map Report* - EDR researched existing USGS - 7.5 Minute Series Topographic Maps of the area (Ventura, CA Quadrangle) dating back to 1948, providing color copies of available maps. See Attachment 5 for copies of all USGS topographic maps.
- *City Directory Abstract* - Historical city directory information was reviewed for the subject site addresses and for the surrounding area. This helps to identify land use at the subject property and the surrounding properties. See Attachment 5 for a complete copy of the EDR City Directory Abstract report.

Interviews and Records Review: FCG staff researched available on-site records and interviewed site personnel during the course of this assessment to determine compliance issues and gather information critical to the success of this project. The collected information appears throughout the body of this report. Individuals interviewed and information collected included, but was not limited to the following:

- Rick Arth, CMH Director of Engineering
- Chuck Chadwell, Safety Coordinator
- Ron Polito, Real Estate Consultant
- Various individuals at each facility were interviewed regarding site operations
- Records were obtained as part of this research, including copies of hazardous waste disposal and manifesting documentation.
- Previous Phase I studies and hazardous materials studies (asbestos, lead paint) were reviewed and studied as part of this assessment. These reports are on file and available for review as necessary.
- A Phase II Environmental Assessment report prepared by AET dated October, 2002 was obtained for the property located at 2900 block of Loma Vista (former gas station).
- Other documents were either reviewed or copied and are included as appropriate.

JUN. 23. 2010 2:49PM CMH8056439312

NO. 6652 P. 7

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June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

Properties Reviewed: All CMH properties in close proximity to the main hospital site were included in this study. A number of the CMH Ventura sites have already been the subject of Phase I Environmental Site Assessment studies. This report serves to update or supplement these reports as necessary. For ease of description, the individual addresses were grouped into common sites based on location. The sites included in our study are noted below in Table 1.

Table 1: List of Site Locations and Descriptions

Site No.	Property Description	Site Address	Comments
1	Community Memorial Hospital	147 N. Brent Street	Main Hospital site
	Main Parking Structure	2752 Loma Vista Road	Property leased from City
2	Medical Office Building (MOB)	188 N. Brent Street	Multi-tenant office building with parking structure
	Cancer Resource Center*	2900-2940 Loma Vista Rd.	Currently under construction Former structures demolished
	Materials/Purchasing	129 N. Joanne	Former residential
	Marketing/Auxiliary Offices	121 N. Joanne	Former residential
	Hospitalist/offices	170 N. Joanne	Former residential
	Private Residence	2982 Martha	Residence (used for staff)
3	Cabrillo Medical Building*	145 N. Brent St	Medical offices
	Medical Offices (Mouse House)*	2825 Cabrillo	Training facility, leased space
	Cabrillo Radiation Oncology Center*	2841 Cabrillo	Cancer treatment center
	Construction storage yard	2793 Cabrillo	Portable trailers for contracting personnel
4	Medical Office Building*	2856 Cabrillo	Medical offices
	Vacant Residential Properties	75, 85, 95 & 107 N. Brent	Sites scheduled for demolition
5	Main Street Property* (new parenting resource center)	2809-2815 E. Main St.	Mixed-use commercial building (upstairs vacant)
6	Medical Arts Plaza (MAP Bldg.)	2705 Loma Vista Rd.	Multiple medical tenants/office
	Parking Lot	81 Eugenia St.	Additional parking for MAP building

* Phase I study previously conducted. Report was updated as part of this project.

See Figure 1 for site for a Site Location Map and Figure 2 for a Site Plan.

JUN. 23. 2010 2:49PM

CMH8056439312

NO. 6652 P. 8

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Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

2.0 SITE INFORMATION

Site Location: The subject site properties include Community Memorial Hospital and associated properties located in Ventura, CA. The subject site is located in mid-town Ventura in a mixed use area which includes medical offices, commercial, retail and residential properties surrounding the hospital complex. See Figure 1 for a Site Location Map.

Site Descriptions: For purposes of organizing and simplifying this report, the CMH Ventura properties have been divided into six separate sites by area as listed below. Each site is described with emphasis on hazardous materials storage and site operations.

Site 1 – Main Hospital Site

147 N. Brent Street – Community Memorial Hospital

Community Memorial Hospital (CMH) is an 8-story, full service hospital facility servicing the local Ventura County area. FCG spoke with Mr. Rick Arth, Director of Engineering, and Mr. Chuck Chadwell, Safety Coordinator with CMH, as part of our site inspection activities. Mr. Chadwell assisted us during our site inspection and provided valuable information regarding site operations, materials storage and other site conditions.

Facility Engineering and Maintenance operations are housed on the second floor of the hospital. Various repair and maintenance work is conducted on this floor, requiring storage of various cleaning agents, solvents, oils, paints and other items. The mechanical equipment and laundry facilities, including mechanical systems for water treatment, boilers, elevator service rooms and other operations are located in the basement, which contains three natural gas boilers and three chillers. Small quantities of products utilized for maintenance of boiler and related equipment were noted in the northwest corner of the boiler room. Numerous small pumps, related to the boiler/chiller equipment, were observed within this area. Several floor drains were observed within the boiler room, with no indications of leaking, staining or other concerns noted.

An outside area located adjacent to the boiler room and laundry area is used for the storage of water conditioning equipment and associated chemicals and water based laundry products. Water conditioning chemicals (Nalco scale inhibitor, biocides), small quantities of paints and thinners, and a sulfuric acid were noted in this area.

Five overhead traction elevators and three hydraulic elevators are located within the main hospital facility. Reportedly, the hydraulic elevators are all short run (1-3 floors), with one located at the loading dock near receiving on the southwest side of the facility. A minor hydraulic seal leak was reported by Mr. Chadwell on one elevator, which goes from the basement to the third floor of the Huntsinger wing. This leak occurred within a containment area and is not a concern. All the elevators are reportedly serviced by outside companies.

According to Mr. Chadwell, asbestos containing materials have been gradually removed over the years in areas of renovation. Pipe insulation observed within the boiler room, and mechanical rooms inspected during our site investigation were observed to be fiberglass with plastic elbows, however, our inspection did not include a survey for asbestos containing materials at the subject site.

JUN. 23. 2010 2:49PM

CMH8056439312

NO. 6652 P. 9

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June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

A masonry and metal structure is located to the southwest of the main hospital, for storage of the new emergency generator and a 10,000 gallon diesel AST. This equipment is fire department permitted and also includes a monitoring system. West of this area and attached to the southeast side of the parking structure is a separate masonry and metal structure is located next to the generator structure, which houses tank farm including two large oxygen tanks, a cooling tower/condenser room, a flammable materials storage room, a solid waste collection area, and a biohazard and pharmaceutical waste area. According to Mr. Chadwell, solid waste is collected daily by Harrison Industries and Ventura Rendering collects waste grease (stored in 55 gallon drums) from kitchen operations. A steam sterilizer is located within the biohazard and pharmaceutical waste area. Used sharps are also stored in this area for weekly pickup by Stericycle. Mr. Chadwell indicated that regular hazardous waste and medical waste inspections are conducted by County of Ventura Health Division (VCEHD), with the most recent inspection conducted approximately eight months ago. An on line file search was conducted by FCG of the Copies of previous inspections conducted by the County of Ventura Health Department are provided in Attachment 4.

Approximately fifteen 55-gallon drums were observed to be staged on the south side of the main hospital, adjacent to the loading dock. According to Mr. Chadwell, these drums hold cuttings left over from soil boring operations conducted by a geotechnical firm for a soils report related to the proposed new construction project. These drums are not considered an environmental concern, but should be removed from the site in the near future.

2752 Loma Vista Drive – Parking Structure: A concrete parking structure is located to the west of the main hospital, which consists of several levels for employee and general public parking. This parking structure is located on land leased from the City of Ventura and is therefore not part of the Phase I study, as CMH does not own the land. The parking structure was constructed in approximately 1987. During our site inspection, a locked, fenced in area was observed in the northeast corner of the ground level. This area was observed to contain a metal flammables cabinet for storing small quantities of fuel for use in floor sweeping equipment. No recognized environmental conditions were noted within this area or within the parking structure at the time of our inspection.

Site 2 – Properties East of Main Hospital

2900, 2920 & 2924 Loma Vista Road –Cancer Resource Center Property (under construction): Construction of a new cancer resource center is currently underway at this site, located on the south side of Loma Vista Road between N. Brent Street and N. Joanne Avenue. Previous structures on this property were demolished, including 2920-2940 Loma Vista, 153 Joanne, 161 Joanne, 169 Joanne and 184 Brent St. These structures were demolished to make way for the new construction of the Cancer Center. The area is currently a fenced off construction site, with gravel covering the southern portion and the new steel framed structure under construction on the northern portion. Storage of building materials, trailers and equipment was noted throughout the site. No recognized environmental conditions were noted regarding this parcel of property, based on our limited site inspection.

168 N. Brent Street – Medical Office Building (MOB): This is a multi-story office building of roughly 73,000 sq. ft. There are five floors above ground and two levels of parking below ground. The first two floors and half of the third floor are utilized for parking. The remaining upper floors are used for outpatient surgery, radiology and medical office space. Wet processing for x-rays is reportedly conducted on the 4th floor within the mammogram center.

JUN. 23. 2010 2:50PM CMH8056439312

NO. 6652 P. 10

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June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

A 250 KW generator and diesel fuel tank are located in a mechanical room on the south side of the first parking level. This generator was observed to have a 100-gallon internal fuel tank with secondary containment and 150-gallon auxiliary tank. Each tank features secondary containment. No evidence of staining or spills was noted during the site investigation. Three elevators are located in the MOB, which are reportedly operated by overhead traction method. A separate room on the north side of the first level is utilized for storage of compressed gas canisters (nitrous oxide, medical air, oxygen, nitrogen gas and argon for laser surgery). No recognized environmental conditions were noted regarding the MOB based on our site inspection.

2982 Martha Drive – Residential Property (Leased): This residential home has been remodeled and is currently leased. No hazardous materials storage or operations were noted. No recognized environmental conditions were noted during our site inspection.

170 N. Joanne Avenue – Residential/Office Property: This home is currently being utilized as medical office space (Hospitalist) and as a facility for CMH doctors to stay overnight when necessary. No hazardous materials storage or operations were noted. No recognized environmental conditions were noted during our site inspection.

121 N. Joanne Avenue – Marketing Department: This is a former residential property currently used for office space by the hospital's marketing staff. No hazardous materials storage or operations were noted. No recognized environmental conditions were noted during our site inspection.

129 N. Joanne Avenue – Materials/Purchasing Department: This is a former residential property currently being utilized by the Materials/Purchasing Dept. No recognized environmental conditions were noted during our site inspection on May 24, 2010.

Site 3 – Medical Offices on Cabrillo, South of CMH

2793 Cabrillo Drive – Construction Yard: This is an unpaved lot current housing at least 3 small construction trailers and various equipment utilized by contractors working on hospital projects. The lot is estimated at 6,840 sq. ft. (0.15 acre), and is fenced and locked after hours. There are no permanent structures on this property. No concerns were noted from site operations.

2825 Cabrillo Drive – "Mouse House" (Computer Training Center): This is a 2-story office building of approximately 4,320 sq. ft. built in 1973, with parking on the first level and office space above. The site is currently being utilized as a training facility, with offices and computer labs. A small leased space is used by others. The site is used primarily for office and administrative/training purposes. A previous Phase I ESA was conducted by FCG in August of 2007 that also included asbestos sampling. No recognized environmental conditions were noted during our previous Phase I Assessment or from our recent site inspection.

2841 Cabrillo Drive – Cabrillo Radiology and Oncology Medical Center: This is a cancer treatment center with a single-story modular office building of approximately 5,346 sq. ft. built in 1970. A Phase I ESA was conducted by FCG in April/May of 2010 that also included asbestos and lead-paint sampling. This site uses linear accelerator equipment which does not use a radioactive source for treatment. A very small amount of radioactive "seeds" used in Brachytherapy (internal)

JUN. 23. 2010 2:50PM CMH8056439312

NO. 6652 P. 11

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

treatment are stored on site under license with the State Dept. of Public Health. No recognized environmental conditions were noted during our Phase I Assessment of this site. Please refer to our Phase I ESA and Hazardous Materials Survey dated May 28, 2010 for more information.

145 N. Brent Street -- Cabrillo Building: This site includes a two-story commercial building of approximately 12,000 sq. ft. that was constructed in 1985. The site is currently being utilized for medical office purposes. A previous Phase I ESA was conducted by FCG in February of 2008. No concerns were noted at that time. No recognized environmental conditions were noted during our recent site inspection.

Site 4 -- Properties South of Cabrillo

2856 Cabrillo Drive -- Office Building: This is a 2-story medical office building of approximately 4,053 sq. ft. built in 1980. This site is located on the corner of Cabrillo and Glenn. The building is currently vacant, and is scheduled for demolition. A previous Phase I ESA was conducted by FCG in January of 2008 that also included asbestos sampling. No recognized environmental conditions were noted during our previous Phase I or during our recent site inspection.

75, 85, 95 & 107 N. Brent Street -- Vacant Residential: These four homes were constructed in the 1940s and range from 1,100-1,300 sq. ft. with detached garages. The homes have been vacant for several years and were boarded up at the time of our inspection. A previous Phase I ESA was conducted on these residential sites by Criterion Environmental in January, 2006. This assessment also included asbestos sampling at each location. Asbestos was abated from each of the homes within the last 2 years. No recognized environmental conditions were noted during our previous Phase I or during our recent site inspection.

Site 5 -- Main Street Building

2809-2815 N. Main Street -- Commercial Building: This is a two story commercial building that is currently being utilized for commercial/educational purposes on the first floor (Parenting Resource Center), with the second floor used by hospital staff for mock-ups and design of hospital patient rooms. The majority of the second floor was observed to be vacant with the exception of various paints and limited building materials used in the design process. A previous Phase I ESA was conducted by FCG in October, 2006. No recognized environmental conditions were noted during our previous Phase I or during our recent site inspection.

Site 6 -- MAP Building and Parking Lot

2705 Loma Vista Road -- Medical Arts Plaza (MAP Building): This property includes a 2-story, roughly 25,000 sq. ft. medical office building built in 1990, with a paved parking lot on the north side. The MAP Building includes Grossman Imaging Center in Suite #100. This facility conducts magnetic resonance imaging (MRIs), computerized tomography (CAT scans) and X-rays. FCG spoke with a supervisor during our site inspection. Reportedly, no wet processing is conducted and no hazardous waste is generated or stored on site as a result of these procedures. California Kidney Medical Group, Inc. is located in Suite #101. This facility conducts kidney dialysis on site. FCG was unable to speak with a representative at the time of our site inspection, however, it was apparent that typical medical waste is generated, in the form of infectious sharps and other bio-medical waste. A Stericycle recycling truck was servicing this facility at the time of the site

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NO. 6652 P. 12

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Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

inspection. An electrical transformer and emergency generator (with internal 80 gallon diesel tank) are located on the north side of Suite #101, within a blocked in area. No concerns were noted.

Parking Lot – 81 Eugenia Drive: This property is located across Eugenia Dr. to the west of the MAP Building, and functions as the employee parking lot. The site is bordered by medical offices to the south, Katherine Drive to the west, residential property to the north and Eugenia Drive to the east. No concerns were noted during our reconnaissance of the parking lot and adjoining properties during our site inspection.

Table 2: Site Addresses, Parcel Numbers, Size and Zoning

Site Address (site #)	Assessors Parcel No.	Property Size	Zoning	Comments
147 N. Brent St. (1)	077-0-011-250	4.19 acres	"H" hospital	Main Hospital
168 N. Brent St. (2)	077-0-012-310	0.82 acres		MOB
184 N. Brent St. (2)	077-0-012-200	0.06 acres		Former residence, part of
(demolished)	077-0-012-210	0.12 acres		new Cancer Center
2900 Loma Vista (2)	077-0-012-230	0.22 acres	"P-O"	Former gas station, site
	077-0-012-220	0.09 acres	Professional	of new cancer center
2920-40 Loma Vista (2)	077-0-012-010	0.15 acres	Office	Former medical office,
				site of new cancer center
169 N. Joanne (2)	077-0-012-020	0.14 acres		Former medical office,
(demolished)				site of new cancer center
161 N. Joanne (2)	077-0-012-030	0.14 acres	"P-O"	Former medical office,
(demolished)			Professional	site of new cancer center
163 N. Joanne (2)	077-0-012-040	0.15 acres	Office	Former medical office,
(demolished)				site of new cancer center
129 N. Joanne (2)	077-0-012-070	0.15 acres		Materials/Purchasing
121 N. Joanne (2)	077-0-012-080	0.15 acres		Marketing
170 N. Joanne (2)	077-0-031-070	0.14 acres		Hospitalist/Offices
2982 Martha (2)	077-0-033-360	0.15 acres	"R-1-8" Single Family Residential	Overnight Residence
2793 Cabrillo (3)	077-0-011-150	0.15 acres		Construction Yard
2825 Cabrillo (3)	077-0-011-410	0.15 acres		Mouse House
2841 Cabrillo (3)	077-0-011-400	0.31 acres	"P-O"	Cabrillo Radiation
145 N. Brent (3)	077-0-011-330	0.47 acres	Professional	Cabrillo Bldg.
2856 Cabrillo (4)	077-0-021-010	0.15 acres	Office	2-story medical bldg.
107 N. Brent (4)	077-0-021-020	0.11 acres		Abandoned Residential
95 N. Brent (4)	077-0-021-030	0.11 acres	"T5-2"	Abandoned Residential
85 N. Brent (4)	077-0-021-040	0.13 acres	(Neighborhood Center)	Abandoned Residential
75 N. Brent (4)	077-0-021-045	0.14 acres		Abandoned Residential
2809 E. Main St. (5)	077-0-022-130	0.24 acres		Mixed-use bldg.
2705 Loma Vista (6)	074-0-151-080	0.57 acres		MAP bldg.
123 Virginia Dr. (6)	074-0-151-070 + 090	0.14 acres		Parking Lot
81 Eugenia St. (6)	074-0-143-060 + 070	0.14 acres	"T4.5" (urban general)	Auxiliary Parking lot

See Figures 3 for copies of the Ventura County Assessor's Parcel Maps.
See Figure 4 for a copy of the City of Ventura Zoning District Map.

Utilities: Sewer - City of Ventura.
Natural Gas - The Gas Company.
Water - City of Ventura (Casitas Water District).
Power- Southern California Edison.

JUN. 23. 2010 2:50PM

CMH8056439312

NO. 6652 P. 13

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

Environmental Setting: The site is located in a commercial area of mid-town Ventura near the area known as 5 Points (intersection of Main Street, Thompson Blvd, and Telegraph Road. The site is located approximately 1.25 miles east of the Pacific coastline, and ¼ mile northeast of the 101 Freeway. The site is located in a coastal area with foothills to the north to a distance of 2 miles. The Ventura River is located approximately 3 miles west. Local soils consist of sands, silts and clays from erosion of the local foothills. Soil types are considered sandy loam of course grained soils (sands with silts).

Topography: The hospital site and surrounding sites are situated on a relatively flat area approximately 132' above sea level. No significant topographic features were noted on the subject site. All sites are paved with the exception of landscaped areas around the commercial buildings and limited lawns on the former residential properties on Brent and Joanne. Storm drains located along Cabrillo Street, Loma Vista, Brent and Joanne. General area topography slopes from northeast to southwest from foothills to oceans within a one mile radius. Topographic maps are provided in Attachment 5.

Groundwater Depth: Estimated at roughly 50 feet to perched or first groundwater. Depth will vary depending on amount of rainfall and soil saturation conditions. The local groundwater is not used for domestic purposes and is considered non-potable due to high salinity and TDS.

Groundwater Gradient: Estimated to be generally southwest, towards the ocean.

3.0 SITE RECONNAISSANCE

A site reconnaissance was undertaken by Alan Forbess and Dana Stephens on May 24, 2010. Color photographs of the site taken during the reconnaissance appear in Attachment 1. The following items are specific to Phase I assessments of commercial/industrial property:

Hazardous Materials Storage and Use: Chemical storage in the form of typical cleaning products, lubricating oils, paints and similar compounds are used in routine site operations. The medical office practices use typical pharmaceutical drugs and medicines used in patient treatment. Beyond the typical items noted, additional hazardous materials stored or used include the following:

CMH - 147 N. Brent:

- A 10,000 gallon aboveground storage tank (AST) is located west of the main hospital on the east wall of the parking structure. The diesel is used for powering the emergency generator system. The tank is a double walled, steel tank in a locked, contained area. The system is permitted by local Fire and Building Departments.
- Large storage tanks of liquid oxygen (4,000 gal.) and medical air (6,000 cu. ft.), along with compressed gas cylinders (oxygen, nitrous oxide, nitrogen, argon, medical air, etc.) are stored in the main tank farm area, the basement and on the maintenance/engineering area on the 2nd floor. Welding gases (acetylene, argon) are stored used in the engineering and maintenance area.
- Xylene and formaline, chemicals utilized for specimen preservation within the laboratory, are stored for use in the main hospital. Formaldehyde and other aldehyde compounds are used in hospital cleaning and storage operations.
- Flammable storage is located in a locked storage room near the diesel fuel tank. This area includes several containers of paints, aerosols, degreasers, lubricants, etc. were

JUN. 23. 2010 2:50PM CMH8056439312

NO. 6652 P. 14

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

- observed in the storage room. Four 55-gallon drums of waste flammable liquids (waste oils, xylene/alcohol, formalin) were noted in the flammable storage room.
- Boiler treatment chemicals (scale inhibitors, corrosion inhibitors, etc.) are located in the basement. Bleach compounds and various detergents are used in the laundry operations in the basement.
 - A large cooling tower is located to the west of the hospital, with biocide compounds used in treatment process.
 - Lead-acid batteries used in a cell tower site on top of the hospital are estimate at 1,392 pounds (24 batteries at 58 pounds each).
 - Small quantities of flammable liquids (oils, solvents) were noted in appropriately labeled metal cabinets located in the maintenance area and first level of main hospital parking garage. Various cleaning solvents, lubricating oils, and other oil-based compounds are stored in the maintenance/engineering areas on the 2nd floor.

MOB – 168 N. Brent:

- An emergency generator with a 300-gallon diesel fuel tank is located on the ground level parking garage of the MOB. The tank is in a secondary containment device inside a locked mechanical room.
- Compressed gas cylinders (oxygen, nitrous oxide, nitrogen, helium, medical gas) are stored in a locked storage room located on the north side of the ground level.

MAP Building-- 2705 Loma Vista:

- An emergency generator was noted at the NW corner of the building near the rear alley. This generator contains an 80-gallon internal tank for diesel fuel storage.
- Typical use of medicines and drugs used in patient treatment, including oxygen in compressed gas cylinders.

Remaining Structures

- The remaining Ventura properties store only limited quantities of typical compounds used in facility maintenance and patient treatment. The Cabrillo Radiation Oncology Center stores a very limited amount of radioactive "seeds" used in internal treatment of cancer patients. All storage is conducted in compliance with the radioactive materials license. No concerns were noted (see the individual Phase I ESA for the Cabrillo Radiation site for more information. No significant hazardous materials storage was noted beyond the typical medical practices and routine building maintenance compounds noted.

Waste Generation, Storage & Disposal: All medical practices generate typical bio-medical wastes, infectious sharps and similar wastes. Silver-containing photochemical wastes from x-ray processing are generated in a limited number of sites. The following is a summary of waste generation and disposal issues:

- Infectious sharps and bio-wastes are stored in red plastic containers throughout the main hospital, MOB and MAP buildings. Stericycle, a contract disposal service company, regularly picks up the waste and recycles the containers for reuse. Medical, pharmaceutical and sharps waste are collected and stored within the Biohazard storage room located to the southwest of the main facility.
- An infectious waste storage room is located near the emergency generator, cooling tower and flammable storage room. This room is used for storage of red containers

JUN. 23. 2010 2:50PM CMH8056439312

NO. 6652 P. 15

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

- and bags used for bio-hazardous waste. A sterilizer is located within this room, to treat infectious waste sterilize equipment.
- Three 55-gallon drums of waste oil, waste xylene and waste formalin were found in the flammable storage area. According to staff, these drums are regularly recycled by a permitted facility.
 - Spent batteries are also collected and stored in the hazardous materials storage room until 100 pounds are reached, when they are then picked up by an outside company.
 - Two 55-gallon drums of rendering oils and fats from the kitchen operations are located adjacent to the trash compactor setting. These drums are recycled through a local rendering company.
 - Infectious wastes and sharps from surrounding facilities are forwarded to the hospital for disposal or incineration.

Aboveground Storage Tanks (ASTs): Three backup generators are located on the main hospital property, one of which is not yet online, but scheduled to be online soon. These generators are reportedly maintained by an outside company.

One 10,000 gallon diesel, double walled, monitored AST is located in a new masonry enclosure located to the west of the hospital building, along with emergency generators. This AST is permitted by the Ventura County Fire Department. These permits were requested and reviewed by FCG. No violations or other concerns were noted.

An emergency generator and 300-gallon above ground storage tank are located at the MOB - 168 N. Brent Street for the same day surgery center.

An emergency generator with an internal 80-gallon tank is located at the MAP building.

Two large liquid oxygen tanks are located in the tank farm area west of the hospital. Small tanks used in water treatment or boiler operations were noted in the basement of the hospital.

No other storage tanks were noted

Underground Storage Tanks (USTs): One 20,000-gallon diesel UST was formerly located on the CMH property, near the loading dock at the southwest corner of the facility. A leak was discovered during tank removal procedures in 1989. The site was remediated, with closure from the regulating agency in 1994. A second UST was removed in 2009 as verified by City of Ventura file documentation and replaced with the new above ground tank. No leaking or contamination was noted during the removal of this tank.

A former gas station was located on the corner of Loma Vista and Brent St., across from the hospital site, from approximately 1957 to 1974. This gas station property was abandoned and demolished after purchase of the land by the hospital. A Phase II Soil Sampling Assessment was conducted by Applied Environmental Technologies (AET) of Ventura, in 2002. A series of soil borings were completed to depths of 15' in laterally separate locations based on the presumed locations of former tanks and dispensers. No hydrocarbon contamination was found in any of the samples collected and analyzed. See Attachment 4 for a copy of the AET Phase II report.

No other underground storage tanks were found or indicated at any of the other subject site properties.

JUN. 23. 2010 2:51PM CMH8056439312

NO. 6652 P. 16

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

Suspect Fill Connections & Vents: None found.

Unidentified Cover Plates, Pipes, Drains, etc.: No unidentified cover plates, pipes, drains, etc. were noted during our site investigation.

Sumps, Pits, Clarifiers, etc.: A sump pump is located on the east side of the boiler room in the basement of the main hospital, as part of a waste water clarifier. Clarified water is then pumped into the sanitary sewer system. A grease trap/interceptor is located near the kitchen to separate oils and greases from the No other sumps, pits, clarifiers or similar wastewater holding devices were found. No concerns were identified regarding sumps, pits, clarifiers, etc.

Waste or Trash Piles: No waste piles or excessive trash was found. Solid waste bins are located at each site with routine pick-up by the local waste disposal company.

On Site Landfills: None found or indicated based on files and documents reviewed.

Disturbed Surface Areas: No significant disturbed surface areas were noted.

Discolored Soil, Asphalt, etc.: Minor staining of the asphalt parking surfaces consistent with vehicle parking was noted. No concerns were identified.

Distressed Vegetation Areas: No significant distressed vegetation areas were found.

On Site Wells: None found. A review of oil well drilling records was conducted by EDR, with no evidence of exploration or production within close proximity of the site.

High Power Transmission Lines: None found. Typical electrical power poles for street lights are located along Main Street. No high power lines were noted.

PCBs/Electrical Transformers: One small dry-type electrical transformer was noted in the electrical room. Limited overhead power lines and transformers area located in the area of the site. All known electrical transformers with PCB's were changed out in the 1970's, according to previous inquiries made to Southern California Edison.

Asbestos and Lead Paint: Asbestos surveys have been conducted on the following properties:

- 2825 Cabrillo
- 2841 Cabrillo (included lead survey)
- 145 N. Brent
- 2856 Cabrillo
- 107 N. Brent
- 95 N. Brent
- 85 N. Brent
- 75 N. Brent
- 2809 E. Main St.
- Cancer Resource Center – former properties, including 184 N. Brent St., 2920-40 Loma Vista, 169 N. Joanne, 161 N. Joanne and 153 N. Joanne. These properties were demolished to make way for the new construction project.

Based on the age of the structures, all buildings constructed before 1980 have increased potential for asbestos and lead paint to be present. The main hospital has reportedly abated a significant

JUN. 23. 2010 2:51PM CMH8056439312

NO. 6652 P. 17

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

amount of asbestos during previous renovation projects. This survey did not include asbestos or lead testing of sites where no previous testing was documented.

Survey of Surrounding Properties:

The following table identifies the surrounding land use in all directions (also refer to Figure 2):

Table 3 - Surrounding Land Use

DIRECTION	ADJACENT LAND USE	CONCERNS
North	The main hospital of the site is bordered by the Loma Vista Rd., with the Medical Arts Plaza and parking lot on Eugenia located north of Loma Vista Rd. Several medical office buildings and other commercial properties are located along Loma Vista Rd. with residential properties further north.	None
South	The southernmost properties are bordered by Cabrillo Dr., Glen St. and a large city parking lot. Several commercial properties are located south along Main Street, including several restaurants, clothing stores and similar retail properties.	None
East	The easternmost properties are bordered primarily by a residential neighborhood with limited medical offices along N. Brent St.	None
West	The westernmost properties are bordered by commercial properties along Main St., with residential further west.	None

4.0 RECORDS REVIEW

Summary of Subject Site/Area Land Use: Local area land use has been a mix of commercial and a residential use dating back to the 1940's, with previous land use shown as agricultural. The hospital site was developed in the 1930's, with several expansions over the years. Significant increased commercial development began in the late-1940's, with the area almost completely developed by the 1960's. See the following sections for more information regarding local land use and subject property use.

4.1 Historical Records Review

Topographic Map Review: EDR provided copies of the USGS - 7.5 Minute Series Topographic Maps of the Ventura Quadrangle as part of our research. The maps provided by EDR date from the following years: 1910, 1948, 1951 and 1967. We reviewed these maps for indications of land use on the subject site or surrounding sites which might be of environmental concern. The 1910 map is of poor scale and shows the general area being sparsely developed. The 1948 map shows the area as being in the easternmost edge of incorporated Ventura, with sparse development to the east, agricultural use (citrus orchards) to the south, and residential and commercial properties to the west and north. The 1951 map indicates development of the area of the site, with increased development to the north and south. Foster Memorial Hospital (now Community Memorial) is indicated to the north of the subject site. The 1967 map shows increased development in all directions. These maps indicate the area of the site is within a developed zone of housing and commercial properties, with

JUN. 23. 2010 2:51PM CMH8056439312

NO. 6652 P. 18

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

no concerns on or near the subject site. The maps show no evidence of tanks, sumps, drainage or other concerns. See Attachment 5 for a copy of the Topographic Maps provided by EDR.

Aerial Photographs: EDR provided photocopies of aerial photographs dating as far back as 1938. Selected photographs from their collection were reviewed and include the following years: 1938, 1945, 1959, 1964, 1970, 1977, 1989, 1994 and 2002. These photos were studied for evidence of previous land use, signs of contamination, hazardous materials storage, and other concerns. All photographs are provided in Attachment 5. The following table summarizes the results of this review:

Table 4 - Aerial Photo Review

DATE FLIGHT SCALE	SUBJECT-SITE LAND USE	SURROUNDING LAND USE	CONCERNS
1938 Laval 1"=555'	The majority of the subject properties are in agricultural use (orchards, open space) with no identified structures. The CMH property appears to be developed.	Agricultural in adjoining areas, with limited residential development to the north of Loma Vista. No development along Brent St. or Main St. with the exception of a residential property on the southeast corner of Loma Vista and Main.	None
1947 Tubis 1"=666'	Cabrillo Drive and Glen Street are in place with evidence of residential development. Foster Memorial Hospital appears in place.	Increased residential and commercial development is seen to the north and west, with citrus orchards in place to the south and east and northeast.	None.
1959 Robinson 1"=555'	The subject site properties have been developed. The hospital facility is in place, with a large parking area to the west.	More dense residential and commercial development in all areas with Main St. fully developed with commercial properties. Significant residential development in all directions.	None.
1964 Mark Hurd 1"=666'	No significant changes.	More dense residential and commercial use in all directions.	None.
1970 Mark Hurd 1"=333'	Redevelopment of subject properties on N side of Cabrillo Dr. is evident, with current commercial structures in place.	More dense development, including expansion of hospital site. Previously residential structures along S side of Glen St. are now a parking lot.	None.
1977 Teledyne 1"=666'	No significant changes from previous photo.	Dense commercial and residential land use in all directions.	None.
1989 USGS 1"=666'	No significant changes from previous photo.	Dense commercial development in all directions.	None.
1994 USGS 1"=666'	No significant changes from previous photo.	Dense commercial development in all directions.	None.
2002 USGS 1"=666'	No significant changes from previous photo.	Dense commercial development in all directions.	None.
2005 USGS 1"=666'	No significant changes from previous photo.	Dense commercial development in all directions.	None.

JUN. 23. 2010 2:51PM CMH8056439312

NO. 6652 P. 19

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

Sanborn Map Review: EDR Sanborn, Inc. reviewed their collection for Sanborn map coverage of the subject site and vicinity. Coverage of the subject site was provided in maps which date from 1950, 1963, 1966 and 1968. The hospital structure is noted on all maps provided. See Attachment 5 for maps provided through the EDR search. The following is a summary of map findings:

- The 1950 map shows the original Foster Memorial site, which is on the western portion of the current parcel. Cassandra Street (now abandoned) is located just south of the hospital, with residential sites across Loma Vista to the north.
- The 1963 map shows the addition on the east side on Brent St. A gas station is noted on the SE corner of Loma Vista and Brent. Residential and office sites are located along Cabrillo to the south of the hospital. Offices and dwellings are noted Loma Vista, Brent and Joanne in the current location of the MOB and new Cancer Center. A medical office is noted in the area of the MAP building. The Main street property appears to be a furniture store.
- The 1966 map shows no significant change from the previous map, with the exception of an addition to the south of the hospital. No hazardous material storage concerns are shown.
- The 1968 map shows the addition of the oxygen tanks and gas cylinder storage, and a cooling tower in a separate structure to the west.

City Directory Review: EDR was also contracted to review historical and current city directories for address listings at the subject site properties and nearby sites. The EDR report is included in Attachment 5 for your review. The search was conducted from a span beginning in 1926 and ending in 2002. Properties listed for N. Brent St. and Cabrillo Dr. were exclusively residential listings until the 1970-1980 directories, when many addresses were listed as physicians or other medically related businesses. Similarly, properties listed for Dalton St., N. Joanne Ave., Virginia Dr., and Martha Dr. were predominantly residential until later years, when some were listed as medically related offices. Properties listed along Main Street were exclusively commercial properties. Properties listed along Loma Vista were predominantly commercial/medical related.

Neighboring site listings show a variety of residential listings along Cabrillo and Brent Streets until the 1950's, with commercial properties along Main Street. An increase in medical offices along Cabrillo and Brent are noted throughout the 1960's and 1970's. Neighboring site listings show Five Points Service Station at 2885 E. Main St. since 1940, with a variety of residential listings and commercial properties along Main Street and in the surrounding area. No concerns were noted from our review of historical city directory listings.

4.2 Regulatory Agency Records Review

City of Ventura Building and Safety: Permits, plans and similar documents on file were reviewed at the Building Department counter through their computerized records system. No significant code violations or other relevant concerns were noted at any of the subject property addresses, based on our review of Building and Safety documentation. Permits for construction and various renovations were found on file. Selected permits and documentation from the city files were photocopied and appear in Attachment 2. Due to the volume of materials, only a limited number of files were copied, with emphasis on original building permits or significant renovations.

City of Ventura Fire Department: Relevant information obtained from the City of Ventura Fire Department includes:

JUN. 23. 2010 2:51PM CMH8056439312

NO. 6652 P. 20

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

Community Memorial Hospital – 147 N. Brent Street

- Annual Hazardous Materials Certification Statement, which lists all hazardous materials with a Max Daily Amount and where they are located. A copy of this list is provided in Attachment 3.
- Underground Storage Tank/Spill Prevention Control & Countermeasure Plan
- Permit for UST removal dated 7/10/09
- Emergency Generator Installation – Piping & Leak Detection Installation Inspection Report dated 7/6/09
- Permit Application for the installation of the 10,000 gallon AST
- Permit Application for UST piping upgrade dated 8/16/07
- UST System Installation Inspection Report for 20,000 gallon diesel UST emergency generator with a date of 1/16/03
- UST Release (Leak)/Contamination Site Report dated 2/18/94 (diesel)
- UST Removal Application for Permit dated 8/23/89 & 1/8/90 for 10,000 gallon tank

Plaza Surgery Center – 168 N. Brent Street #403

- Annual Hazardous Materials Certification Statement, which lists all hazardous materials with a Max Daily Amount and where they are located.
- Hazardous Materials Management Plan (HMMP)

Kidney Dialysis Center of Ventura, LLC – 2705 Loma Vista Road

- Hazardous Materials Inventory for an emergency generator diesel fuel tank (80 gallon)
- Permit Application for the generator

Various other Hazardous Materials Inventory Statements (HMIS) for small quantities of materials utilized at various medical offices were also provided and reviewed. With the exception of the 1994 leaking underground fuel tank documentation from Community Memorial Hospital, no significant concerns were noted based on the documents reviewed. Selected permits and documentation from the City of Ventura Fire Department were photocopied and appear in Attachment 3.

County of Ventura Fire Department: A file request was made to this agency, with a response indicating that the subject site is within City jurisdiction, with no County files noted.

Ventura County Environmental Health: We reviewed the records system through an on-line search by address and found a significant number of records for the subject site address, including hazardous materials inspection and underground tank files. These files include documentation of the UST removal in 1989, where only minor contamination was found. A file was opened and the site was not closed in 1994. Hazardous materials inspection reports were also noted, with issues related to on-site treatment of formalin waste, and discharge of waste formaldehyde to the sewer system. These issues were resolved with county oversight.

5.0 REGULATORY AGENCY DATABASE REVIEW

EDR conducted a comprehensive search of existing databases maintained by federal, state and local regulatory agencies for known or suspected sites with contamination issues, waste discharge permits, hazardous materials/waste storage permits, underground storage tank permits, leaking underground storage tanks, and similar environmental concerns. The complete EDR GeoCheck

JUN. 23. 2010 2:51PM

CMH8056439312

NO. 6652 P. 21

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

report is approximately 166 pages in length and provides comprehensive information regarding the individual databases reviewed, any listings at the subject site address, and the listed sites within a specified radius of up to 1 mile from the subject site. This report also provides information on the local geology and hydrogeology, physical setting and similar information. Please refer to Attachment 5 for the complete EDR database search report. We have summarized the EDR report findings below:

Subject Site –

- Community Memorial Hospital at 147 N. Brent Street. This site is listed as a LUST cleanup site. The leak was discovered during tank closure procedures in 1989 and remediated, with closure from the regulating agency in 1994. The leak was related to a diesel fuel overspill problem that impacted soils only. This site appears on five databases (LUST, CORTESE, FINDS, Ventura Co. BWT and UST). A FINDS list designation appears to be related to regulated emissions under the local Air Pollution Control Board (APCD). The site is also a registered Hazardous Waste Generator. See Attachment 5 for details.
- Ventura Radiology at 168 N. Brent Street is listed as a RCRA Small Quantity Generator (SQG). No indication of violations or other potential concerns were indicated in the EDR records.
- Former Gas Station – 2906 Loma Vista Rd: This is a former "Richfield" gas station operated by Taylor Gard from at least 1957 until 1970 (per historical listings). The site appeared on EDR's Historical Auto Stations database. AET performed a Phase II sampling assessment of the site in October, 2002 and found no residual contamination. The site is listed is only for informational purposes and does not appear on any site with known contamination or clean-up requirements.
- The remaining subject site properties were not found on any of the databases researched by EDR. This indicates that it is unlikely that these sites have been permitted for hazardous materials storage, underground storage tanks, hazardous waste generation, chemical spills or releases that would trigger reporting to regulatory agencies. It should be noted that some sites may still have hazardous materials issues, but may have never been listed in the agency databases reviewed as part of this study.

Surrounding Sites: Several surrounding sites were identified within a 1 mile radius of the subject property. The following is a summary of sites in Of these listed sites, the greatest concern are those sites with known or suspected groundwater contamination located upgradient of the subject site, or those sites with significant contamination located immediately adjacent to, or in close proximity of, the subject site with potential for migration to impact the site.

The following is a summary of the listed sites in close proximity to the subject site:

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System. A review of the LUST list, as provided by EDR, and dated 03/22/2010 has revealed that there are 18 LUST sites within approximately 0.5 miles of the target property.

- CROCKER NATIONAL BANK PROPERTY, 2991 LOMA VISTA RD
Status: Completed - Case Closed
- LA CIENEGA 2599 MAIN ST
Status: Completed - Case Closed
- VENTURA COUNTY MEDICAL CTR 3291 LOMA VISTA RD

JUN. 23. 2010 2:52PM CMH8056439312

NO. 6652 P. 22

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

- Status: Completed - Case Closed
- o UNOCAL #4591 3477 TELEGRAPH RD
Status: Open - Site Assessment
- o MOBIL OIL SS #14-466 3498 TELEGRAPH RD
Status: Open - Remediation
- o THRIFTY RENT A CAR 2915 TELEGRAPH RD
Status: Completed - Case Closed
- o TEFFERTELLER-NAUMAN PROPERTY 2901 MAIN ST
Status: Open - Site Assessment
- o FIVE POINTS CAR WASH 2912 TELEGRAPH RD
Status: Open - Remediation
- o USA PETROLEUM SS #071 2661 THOMPSON BLVD
Status: Open - Remediation
- o USA PETROLEUM SS #071 2661 THOMPSON BLVD
Status: Completed - Case Closed
- o WEBER MOTOR CO 2611 THOMPSON BLVD
Status: Completed - Case Closed
- o MASTERSON MOTORS (FORMER) 3111 MAIN ST
Status: Completed - Case Closed
- o THRIFTY OIL #185 2314 THOMPSON BL
Status: Open - Remediation
- o LOOMAN FUEL SUPPLY 3118 MAIN ST
Status: Completed - Case Closed
- o CHEVRON #9-9166 (FORMER) 2307 THOMPSON BL
Status: Completed - Case Closed
- o TOSCO - 76 SS #1481 2292 THOMPSON BL
Status: Open - Remediation
- o JONES PROPERTY 298 SEAWARD AVE
Status: Completed - Case Closed
- o MCCONICA MOTORS INC 2260 THOMPSON BLVD
Status: Open - Assessment & Interim Remedial Action

Summary of LUST Listings: Of the 18 listed sites, 10 have been remediated and closed by the regulatory agencies involved. Of the remaining 8 sites, only two are located upgradient with respect to groundwater gradient. However, both sites (Unocal #4591 and Mobil #14-466) are approximately ½ mile east of the subject site and are currently being remediated under agency oversight. Several of the listed sites also appear on the CA FID, Hist UST and SWEEPS databases.

Federal RCRA generators list (RCRA-SQG): The RCRA database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. A review of the RCRA-SQG list, as provided by EDR, and dated 01/13/2010 has revealed that there are 7 RCRA-SQG sites within approximately 0.25 miles of the target property. They are listed below:

- o DOHS VENTURA COUNTY HEALTH SERVICES, 3147 LOMA VISTA ROAD
- o CRYSTAL DRY CLEANERS 2780 E THOMPSON Blvd
- o TESORO WEST COAST COMPANY LLC 2661 E THOMPSON BLVD
- o WEBER MOTOR CO. 2611 THOMPSON BLVD
- o SHUTTERBUG THE 2549 EAST THOMPSON BLVD
- o BARBS BORCHARD CLEANERS 319 BORCHARD DR

Summary of RCRA-SQG Listings: Of the 7 listed sites, only one site is in close proximity (Ventura Radiology), which is under the control of Community Memorial Hospital (client). This site generates

JUN. 23. 2010 2:52PM

CMH8056439312

NO. 6652 P. 23

Forbess Consulting Group, Inc.
June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

small quantities of hazardous waste with no recorded violations noted. No concerns to the subject site were noted.

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. A review of the ENVIROSTOR list, as provided by EDR, and dated 02/08/2010 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

- o WHEATON PLASTIC CONTAINERS, 2668 CHANNEL DR Status: Active (This site also appears on the CERCLA, RCRA-SQG, FINDS, CORTESE, LUST, SLIC and HAZNET databases).

Summary of ENVIROSTOR Listings: The only listed site is over ½ mile downgradient and should pose no threat to the subject site.

SLIC: SLIC is the acronym for Spills, Leaks, Investigation and Cleanup Cost Recovery database for Region 9 which comes from the California Regional Water Quality Control Board. A review of the SLIC list, as provided by EDR, and dated 03/22/2010 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

- o PLAZA VENTURA - CRYSTAL DRY CLEANERS, 2764 EAST THOMPSON BLVD
Facility Status: Open - Site Assessment

Summary: This is a former dry cleaning facility that shows evidence of contamination from PCE, with over 466 tons of contaminated soil removed from the site. The site is located approximately ¼ mile downgradient of the subject site and is currently being remediated under the oversight of the RWQCB. Groundwater monitoring is being conducted and should not affect the subject site.

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle 1 of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database. A review of the UST list, as provided by EDR, and dated 03/22/2010 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

- o GAS EXPRESS, 2599 E MAIN ST
- o USA GASOLINE CORPORATION, 2661 E THOMPSON BLVD

Summary: The UST database is for actively permitted underground storage tanks. The two sites in question are active gas stations with no active leaks or problems noted.

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NO. 6652 P. 24

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June 10, 2010

Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

Conclusion: The subject site does not appear on any of the environmental databases researched by EDR. None of the surrounding sites listed by EDR within close proximity of the subject site were identified with potential contamination which might impact the subject site. Please see Attachment 5 for detailed information regarding the environmental data research and specific information on surrounding sites as listed in the EDR Radius Map™ Report with GeoCheck®.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The goal of conducting a Phase I Environmental Site Assessment is to identify recognized environmental conditions at the time of the assessment by conducting appropriate inquiry into the previous and existing uses of the property. Per the ASTM Standard (E 1527-00), the term *recognized environmental condition* is defined as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products even under conditions in compliance with laws." The definition within this standard goes on to state that "The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

FCG has completed a Phase I Environmental Assessment of the subject site in accordance with the ASTM Standard Practice for Environmental Site Assessments (E 1527-00). Our assessment has revealed the following significant findings:

1. **Previous Land Use:** Local area land uses have been a mix of commercial and residential uses dating back to the 1940's, with previous land use apparently being agricultural. The hospital site was developed in the 1930's, with several expansions over the years. Significant increased commercial development began in the late-1940's, with the area almost completely developed by the 1950's. The hospital site formerly stored diesel fuel in an underground tank which showed minor contamination upon removal in 1989. After remediation work and monitoring was completed, the site was closed by local agencies in 1994. A former gas station located at the 2900 block of Loma Vista operated from the 1950's until at least 1970. The property was investigated by a Phase II soil sampling assessment conducted by AET in 2002. This testing event revealed no evidence of hydrocarbon contamination. All other sites within this area were used for medical offices, retail sales or residential. No recognized environmental conditions were noted from our review.
2. **Current Site Use:** The subject site properties are used primarily for hospital and medical offices or related services. Fuel storage for on-site emergency generators at three of the properties (CMH, MOB, MAP) is all aboveground and permitted by local agency. All current hazardous materials storage and hazardous waste generation is in compliance with regulatory requirements. Medical waste (sharps, bio-hazardous waste) is properly stored and picked up by an outside service company on a regular basis. No significant concerns or environmental conditions were found that would warrant further investigation or assessment.

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NO. 6652 P. 25

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CMH Ventura Properties
Ventura, CA

3. **Surrounding Site Use:** The site is located in a heavily developed, commercial and mixed use area of mid-town Ventura, with numerous retail sales, restaurants, and commercial properties in close proximity. Residential properties are located in all directions, with the exception of commercial properties on Main Street and Loma Vista. A total of 17 leaking underground storage tank (LUST) properties were located within ½ mile of the subject site. All of the sites in question were either closed (remediated and the case file closed by regulatory agency), in progress on remedial action, or actively assessing the extent of contamination. All of the site located upgradient of the subject site have been closed, indicating no potential threat of contaminant migration to the subject site. No concerns were found from the surrounding sites.

Conclusion: No recognized environmental conditions were identified as a result of our Phase I Environmental Site Assessment. No further assessment is recommended at this time.

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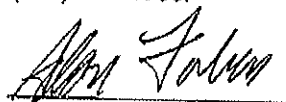
Phase I Environmental Site Assessment
CMH Ventura Properties
Ventura, CA

7.0 QUALITY AND LIMITATIONS STATEMENT

This report has been prepared for the exclusive use of Community Memorial Hospital as it pertains to the properties located at 147 N. Brent Street, 75, 85, 95, 107, 145, 168 and 184 N. Brent Street, 2705, 2752, 2900, 2920 and 2924 Loma Vista Road, 2793, 2825, 2825, 2841 and 2856 Cabrillo Drive, 121, 129, 153, 161 and 169 N. Joanne Avenue, and 2809-2815 E. Main Street, Ventura, California. Any use of or reliance upon this report and supporting data, by a party other than specifically named above, shall be solely at the risk of such third party.

All interpretations made by Forbess Consulting Group, Inc. are opinions based on evaluation of the research information collected and visual assessment of the location. These procedures have limitations, and as such, should not be construed that all possible site conditions were identified. It should be recognized that there is no guarantee this study has covered all possible environmental issues at the site. In performing our professional services, we have applied present professional and scientific judgment and used a level of effort consistent with the standard practice measured on the date of this report and in the locale of the project site for similar type studies. Forbess Consulting Group, Inc. shall not, except in the case of gross or willful negligence on our part, be held liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our employees or agents representing our behalf. Forbess Consulting Group, Inc. makes no warranty, expressed or implied, in fact or by law, whether of merchantability, fitness for any particular purpose, or otherwise, concerning any of the materials or "services" furnished to the client.

The work for this report has been performed by Alan Forbess, California Registered Environmental Assessor No. 06634. If you have any questions or concerns, please do not hesitate to call us at (805) 646-1995.



Alan Forbess, Principal
Registered Environmental Assessor No. 06634
Certified Asbestos Consultant No. 94-1549

June 10, 2010
Date



Figures:

- 1 - Site Location Map
- 2 - Site Plan
- 3 - Assessor's Parcel Maps

Attachments:

- 1 - Color Photographs of Site Inspection (taken 5-24-10)
- 2 - City of Ventura File Documentation (partial)
- 3 - Ventura County EHS File Documentation (partial)
- 4 - AET Phase II Environmental Assessment (10/02)
- 5 - EDR Environmental Database Search Radius Map with GeoCheck®
(Includes aerial photos, Topo maps, Sanborn maps, city directories)

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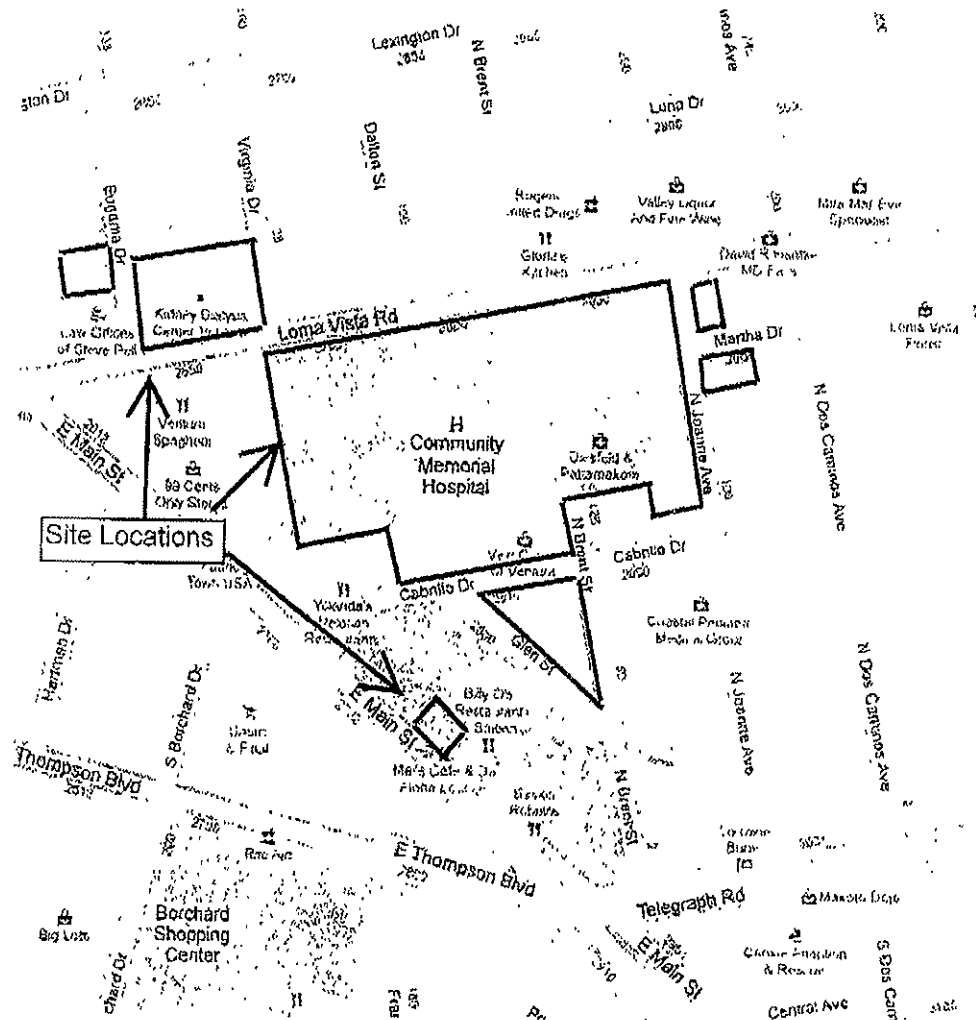


Figure 1 – Site Location Map
 Community Memorial Hospital
 Ventura Properties
 147 N. Brent Street
 Ventura, CA 93003

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 805.646.1995

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SITE LOCATION MAP - LEGEND

1. Community Memorial Hospital Site, 147 N. Brent (Main Hospital)
Main parking structure, 2752 Loma Vista (leased, city-owned property)
 2. Medical Office Building (MOB), 168 N. Brent (medical office and parking)
Cancer Resource Center (under construction), 2900 block of Loma Vista
Marketing/Auxiliary Offices, 121 N. Joanne (former residential)
Purchasing/Materials, 129 N. Joanne (former residential)
Hospitalist and Overnight Residence, 170 N. Joanne & 2982 Martha
 3. Cabrillo Medical Building, 146 N. Brent St (medical offices)
Mouse House, 2825 Cabrillo (training facility)
Cabrillo Radiation Oncology Center, 2841 Cabrillo (treatment center)
Construction Trailers and storage yard, 2793 Cabrillo
 4. Medical Office Building, 2856 Cabrillo (medical offices)
Vacant Residential Properties, 75, 85, 95 & 107 N. Brent
 5. Main Street Property, 2809-2815 E. Main St. (mixed-use property)
 6. Medical Arts Plaza (MAP Bldg.), 2705 Loma Vista Rd. (multiple tenants)
Parking Lot, 81 Eugenia St. (additional parking for MAP building)
- See report text for additional site information.

**Figure 2 – Site Map**

Community Memorial Hospital
Ventura Properties
Ventura, CA 93003

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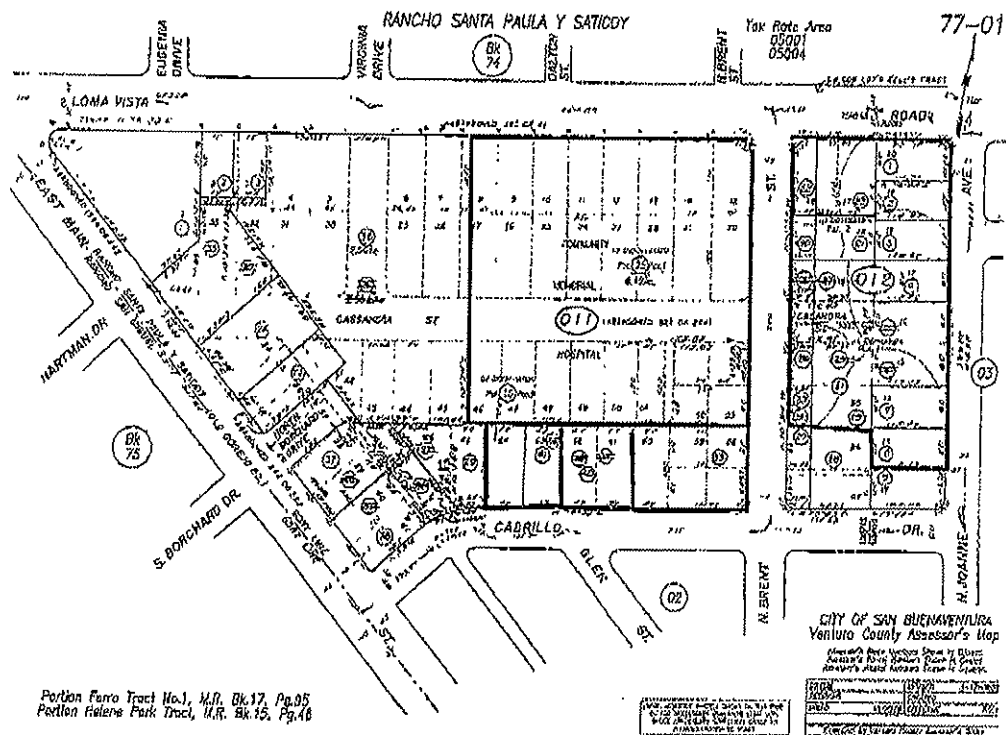


Figure 3-1 Assessor's Parcel Map

Community Memorial Hospital
 and related properties
 Ventura, CA 93003

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NO. 6652 P. 30

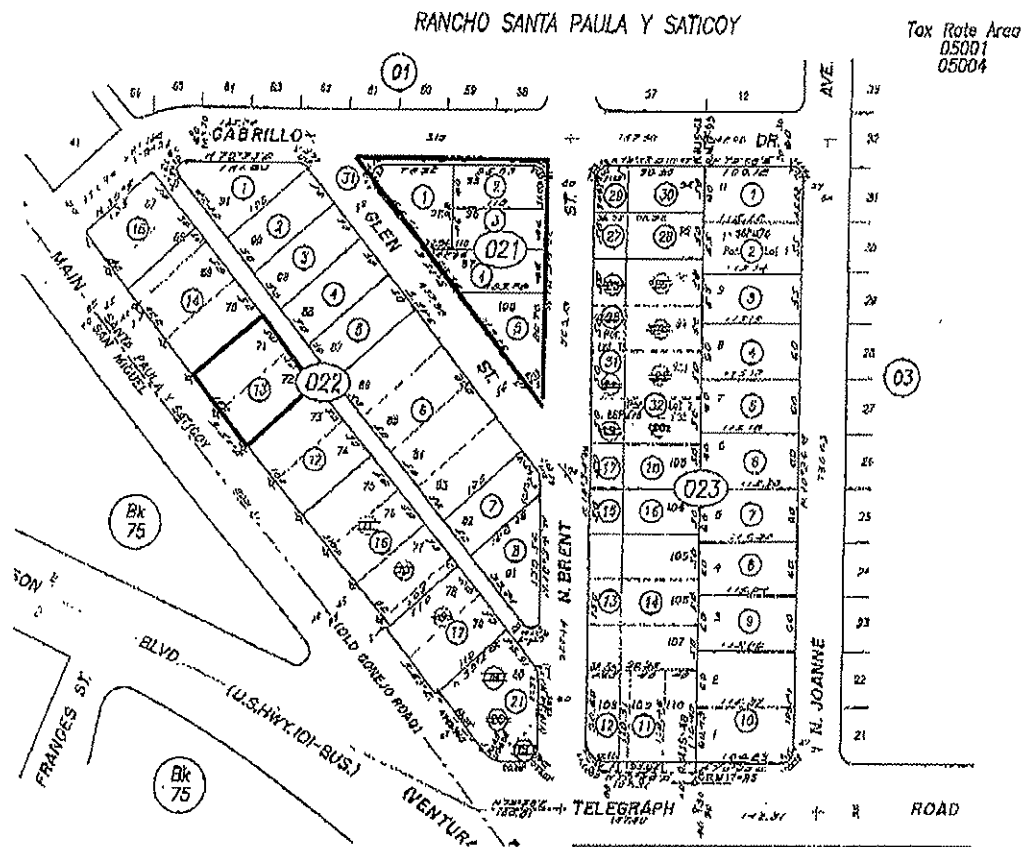


Figure 3-2
Assessor's Parcel Map

Community Memorial Hospital
and related properties
Ventura, CA 93003

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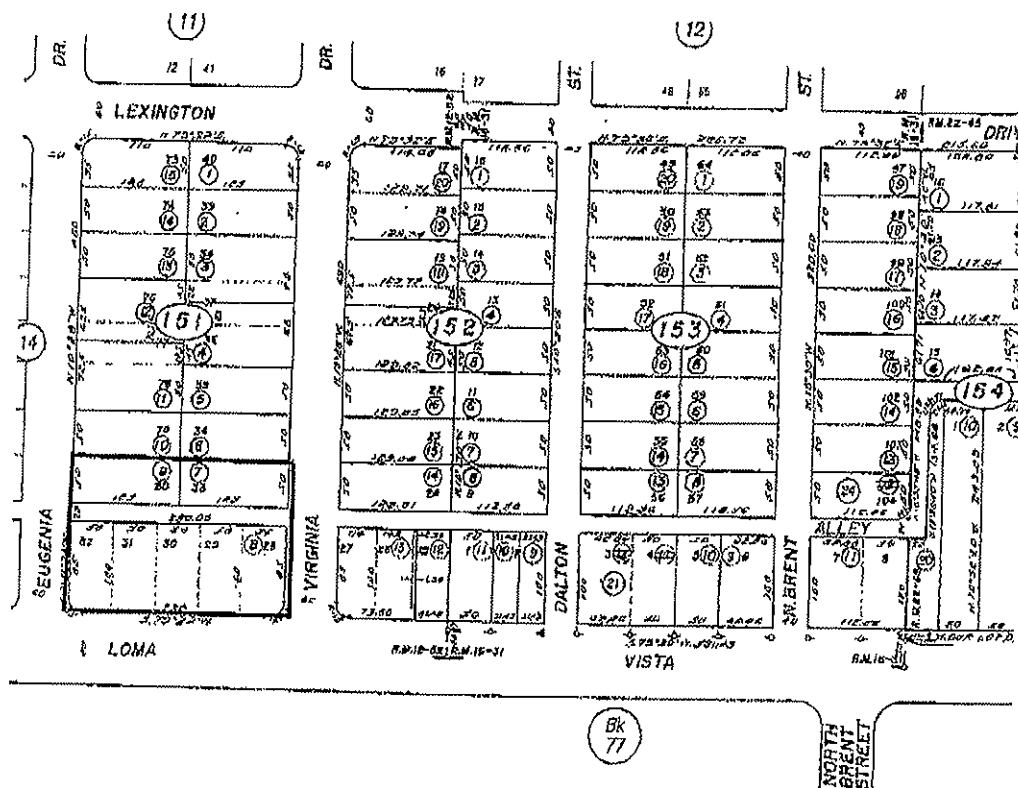


Figure 3-3
Assessor's Parcel Map

Community Memorial Hospital
 and related properties
 Ventura, CA 93003

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 805.646.1995

Appendix L

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). The mitigation monitoring and reporting program is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Environmental Impact Report, specifications are made herein that identify the action required and the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in the Mitigation Monitoring and Reporting Program (MMRP).

To implement this MMRP, the City of Ventura will designate a Project Mitigation Monitoring and Reporting Coordinator ("Coordinator"). The coordinator will be responsible for ensuring that the mitigation measures incorporated into the project are complied with during project implementation. The coordinator will also distribute copies of the MMRP to those responsible agencies identified in the MMRP, which have partial or full responsibility for implementing certain measures. Failure of a responsible agency to implement a mitigation measure will not in any way prevent the lead agency from implementing the proposed project.

The following table will be used as the coordinator's checklist to determine compliance with required mitigation measures.

Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
						Initial	Date	Comments
AIR QUALITY								
AQ-2 Construction Air Quality. The Ventura County Air Quality Assessment Guidelines (October 2003) recommend various techniques to reduce construction-related emissions associated with individual developments. Individual developers within the Hospital District, including the Hospital, shall include techniques to limit emissions of both ozone precursors (NO _x and ROC), diesel PM and fugitive dust (PM ₁₀) in compliance with AQMD Rule 55 and ARB adopted ATCM (13 CCR § 2449.2). At a minimum, these measures shall include, but not be limited to the following as identified below: <ul style="list-style-type: none">▪ Use Tier 2 or Tier 3 engines▪ Contract with an off-road construction equipment provider that has documented compliance with Air Toxics Control Measure (ATCM) PM reduction goals in response to the California Air Resources Board adopted ATCM (13 CCR § 2449.2)▪ Minimize equipment idling time.▪ Maintain equipment engines in good condition and in proper tune as per manufacturers'								

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						Initial	Date	Comments
<p>specifications.</p> <ul style="list-style-type: none"> ▪ Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. ▪ Use catalyzed diesel particulate filters and low-sulfur diesel fuel ▪ The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to reduce dust. ▪ Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. ▪ Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities: <ul style="list-style-type: none"> a) All trucks shall be required to cover their loads as required by California Vehicle Code §23114. b) All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall 								

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<p>include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.</p> <ul style="list-style-type: none"> ▪ Graded and/or excavated inactive areas of the construction site shall be monitored by the City Building Inspector at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust. ▪ Signs shall be posted on-site limiting traffic to 15 miles per hour or less. ▪ During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree 								

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Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
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<p>necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.</p> <ul style="list-style-type: none"> ▪ Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads. ▪ Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations. 								
AQ-3(a) Increase Energy Efficiency. For all new construction, increase energy efficiency by 20% beyond Title 24 requirements.	Applicant and Inspection Services Department	Once, prior to occupancy	PCD and Inspection Services Division	Applicant	Verify approval of plans by Inspection Services Division			
AQ-3(b) Air Quality Mitigation Fees. Phase I and II developers within the Hospital District shall contribute fees to the Citywide Transportation Demand Management Program for respective incremental contributions to air quality emissions in excess of 25 lbs/day threshold prior to	Applicant	Once, prior to occupancy	PCD	Applicant	Verification of payment of funding by applicant.			

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Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
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occupancy. Fees shall be based and paid in accordance with Ordinance 93-37.								
BIOLOGICAL RESOURCES								
BIO-1 Nesting Birds. Proposed project activities (including disturbances to native and non-native vegetation, structures and substrates) should take place outside of the breeding bird season which generally runs from March 1- August 31 (as early as February 1 for raptors) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86). If avoidance of the breeding bird season is not feasible, the Department recommends that beginning thirty days prior to the disturbance of suitable nesting habitat the project proponent should arrange for weekly bird surveys to detect protected native birds occurring in the habitat that is to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors) as access to adjacent areas allows.	Applicant	If necessary, once, 30 days prior to tree removal, grading or disturbance	PCD	Applicant	If necessary. Verify surveys completed and submittal of results.			

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						Initial	Date	Comments
<p>The surveys should be conducted by a qualified biologist with experience in conducting breeding bird surveys. The surveys should continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of clearance/construction work.</p> <p>If a protected native bird is found, the project proponent should delay all clearance/construction disturbance activities within 300 feet of suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist could continue the surveys in order to locate any nests.</p> <p>If an active nest is located, clearing and construction within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, must be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.</p> <p>Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing marking the protected area 300 feet (or 500 feet) from the nest. Construction</p>								

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<p>personnel should be instructed on the sensitivity of the area.</p> <p>The project proponent should record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds.</p>								
CULTURAL RESOURCES								
ARCH-1 Pre-Construction Training. Prior to any earth disturbance or grading, a professional archaeologist shall be retained by the developer to address machinery operators and their supervisors by giving an on-site talk to the peoples who will perform the actual earth-moving activities. This will alert the operators to the potential for finding historic or pre-historic cultural resources.	Applicant	As necessary – prior to earthwork	PCD	Applicant	Documentation supporting preconstruction training, such as attendance logs submitted to PCD for compliance verification.			
ARCH-2 Archaeological Resources. Should unanticipated cultural resource remains (cultural resource remains may include artifacts, shell, bone, features, foundations, and trash pits) be encountered during land modification activities, work must cease, and the Planning Director shall be contacted immediately. The developer shall retain a	Applicant	As needed during grading and upon discovery of an unknown archaeological resource during grading	PCD and NAHC	Applicant	<p>Stop work if unknown archaeological resources are found and measures to mitigate are executed.</p> <p>Confirm resources are evaluated by a qualified</p>			

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						Initial	Date	Comments
qualified archaeologist to oversee handling of the resources in coordination with the Ventura County Archaeological Society and Native American organizations as appropriate.					Archaeologist (if necessary)			
ARCH-3 Human Remains. If human remains are discovered during construction-related activities (any permitted action requiring physical digging or grading of a project area using mechanical equipment or hand tools, including core sampling, soil borings, work required for placing caissons or footings, planting trees, disking, grubbing, trenching and installation of poles, underground electrical systems, sewers, water mains, or other utilities, or geological/geotechnical testing) then the procedures described in Section 7050.5 of the California Health and Safety Code shall be followed. These procedures require notification of the County Coroner. If the County Coroner determines that the discovered remains are those of Native American ancestry, then the Native American Heritage Commission must be notified by telephone within 24 hours. Sections 5097.94 and 5097.98 of the Public Resources Code describe the procedures to be followed after the notification of	Applicant	As needed during grading and upon discovery of an archaeological resource.	PCD, County Coroner, NAHC	Applicant	Stop work if unknown archaeological resources are found and measures to mitigate are executed. Confirm site evaluated by a county coroner and NAHC representative (if necessary).			

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Mitigation Monitoring and Reporting Program

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						Initial	Date	Comments
the Native American Heritage Commission.								
DRAINAGE AND FLOOD HAZARDS								
HYD-1 Storm Drain System Improvements. Phase I redevelopment of the site shall include storm drain infrastructure upgrades necessary to ensure that storm water discharges from Phase I and Phase II redevelopment do not exceed the capacity of existing facilities. Improvements shall include the installation of a 36-inch storm drain in the alley as well as catch basins and additional infrastructure upgrades as necessary, in accordance with the Jensen Design & Survey, Inc. November 2009 report, or as superseded by any subsequent updates. Improvements shall be approved by the Public Works Department, prior to commencement of grading or site improvements.	Applicant and PWD	Once, prior to occupancy	PWD	Applicant	Verify all necessary storm drain improvements are implemented			
NOISE								
N-2 Construction Noise. Though no significant construction-related noise impacts are required, the following noise reduction techniques are recommended to further reduce construction generated noise. Prior to issuance of any Grading, Building Permit or start of construction, the	Applicant and BD	Once prior to grading and/or construction	BD	Applicant	Creation and implementation of the specified noise reduction measures			

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Mitigation Monitoring and Reporting Program

Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
						Initial	Date	Comments
<p>Applicant shall provide, to the satisfaction of the City's Building Official, a Noise Mitigation and Monitoring Program. Such plan shall ensure that the proposed project provides the following:</p> <ul style="list-style-type: none"> • Construction contracts shall specify that all construction equipment, fixed or mobile, shall to the extent feasible be equipped with mufflers maintained according to manufacturer's specifications and other state required noise attenuation devices. • Property owners and occupants located within 0.25-mile of the Project construction site shall be sent a notice, at least 15 days prior to commencement of construction, regarding the construction schedule of the proposed Project. A sign, legible at a distance of 50 feet, shall also be posted at the Project construction site. All notices and signs shall be reviewed and approved by the City's Building Official, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide the contact name and a telephone number of the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints. 								

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Mitigation Monitoring and Reporting Program

Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
						Initial	Date	Comments
<ul style="list-style-type: none"> The Applicant shall provide, to the satisfaction of the City's Building Official, a qualified "Noise Disturbance Coordinator" who shall be responsible for receiving, registering, and responding to any complaints about construction noise. When a complaint is received, the Coordinator shall notify the City within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City's Building Official. All notices that are sent to residential units within 0.25-mile of the construction site and all signs posted at the construction site shall include the contact name and the telephone number for the Disturbance Coordinator. Prior to issuance of a Grading, Building Permit or start of construction, the Applicant shall demonstrate to the satisfaction of the City's Building Official how construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction 								

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Mitigation Monitoring and Reporting Program

Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
						Initial	Date	Comments
<p>equipment staging areas and occupied residential areas, and electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.</p> <ul style="list-style-type: none"> During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. 								
<p>N-3 Acoustical Analyses. Acoustical analyses shall be conducted for new residential developments within the Hospital District and shall incorporate mitigation necessary to ensure that:</p> <ul style="list-style-type: none"> Exterior noise in exterior spaces of new residences and other noise sensitive uses that are used for recreation (such as patios and gardens) does not exceed 65 dBA CNEL; and Interior noise in habitable rooms of new residences does not exceed 45 dBA CNEL with all windows closed. 	Applicant and BD	Twice. Once prior to issuance of a grading permit; once for field verification	PCD and BD	Applicant	Verify exterior usable noise environments are less than 65 dBA CNEL; and that interior habitable noise does not exceed 45 dBA CNEL with the windows closed.			
TRAFFIC AND PARKING								
<p>T-1 Traffic Impact Fees. CMH and any additional developers within the CMH District shall pay applicable City and County traffic impact fees in accordance with adopted policies for fair share ADT attributed to each development. Payment of</p>	Applicant and PWD	Once prior to issuance of building permit or prior to occupancy	PCD and PWD	Applicant	Fees paid			

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 BD City of Ventura Building Department



Mitigation Monitoring and Reporting Program

Mitigation Measure/Condition of Approval	Implementation Responsibility	Timing	Monitoring Division	Funding	Standard for Success	Compliance Verification		
						Initial	Date	Comments
fees shall occur prior to issuance of a building permit or prior to occupancy for each developer within the CMH District.								
T-3 Parking Supply. Reuse of the existing hospital building and new buildings proposed on CMH property and within the CMH District would be subject to compliance with the off-street parking requirements. In order to provide adequate parking for each building pursuant to the Parking Demand Rates of the Community Memorial Hospital District Development Code, parking shall be provided (A) on-site or (B) within 1,250 feet of the hospital if a parking availability study for the building(s) indicates that there will be a sufficient amount of parking spaces. Off-site parking located further than 1,250 feet may be allowed if the following conditions are met: (A) the off-site parking is approved by the Community Development Director; (B) a parking availability study confirms that the off-site parking will provide sufficient parking spaces. On- or off-site (whether within 1,250 feet or not) parking management strategies may include a Transportation Demand Management (TDM) Program. Details of the specifics of the TDM program along with the anticipated reductions in parking shall be reviewed and approved by the Community Development	Applicant and PCD/PWD	Twice. Once prior to construction; once for field verification	PCD and PWD	Applicant	Plan check/ Parking Plan shall indicate how parking requirements are met. Applicant to provide proof of parking supply prior to occupancy.			

Key: **PCD** City of Ventura Planning and Community Development Department
 EA City of Ventura Environmental Analyst
 PWD City of Ventura Public Works Department
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Director.								
<p>T-4 Construction Traffic Impact Mitigation Plan. The applicant shall prepare, implement, and maintain a Construction Impact Mitigation Plan, which shall be designed to:</p> <ul style="list-style-type: none"> Prevent material traffic impacts on the surrounding roadway network. Minimize parking impacts both to public parking and access to private parking. Ensure safety for both those constructing the project and the surrounding community. Prevent truck traffic through residential neighborhoods. <p>The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Public Works Department, Fire, Planning and Community Development and Police to ensure that the Plan has been designed in accordance with this mitigation measure. This review shall occur prior to commencement of any construction staging for the project. It shall at a minimum, include the following:</p> <p>Ongoing requirements throughout the duration of construction:</p> <ul style="list-style-type: none"> A detailed traffic control plan for 	Applicant, PCD and PWD	<p>Plan Check once prior to demolition/ground disturbance.</p> <p>Periodic field verification during construction</p>	PCD and PWD	Applicant	Construction Traffic Impact Mitigation Plan is devised and implemented by the applicant during construction			

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<p>work zones shall be maintained which includes at a minimum accurate existing and proposed: parking and travel lane configurations; warning, regulatory, guide and directional signage; and area sidewalks, bicycle lanes and parking lanes. The plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans must be reviewed and approved by the Public Works Department prior to commencement of construction and implemented in accordance with this approval.</p> <ul style="list-style-type: none"> • Work within the public right-of-way shall be performed between 9:00 A.M. and 4:00 P.M., including: dirt and demolition material hauling and construction material delivery. • Trucks shall only travel on a City approved construction route. Truck queuing/staging shall not be allowed on City Streets. Limited queuing may occur on the construction site itself. • Materials and equipment should not be visible to the public; the preferred location for materials is to be on-site, without storage in the public right-of-way. 								

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<ul style="list-style-type: none"> Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City. <p>Project Coordination Elements that shall be implemented prior to commencement of construction:</p> <ul style="list-style-type: none"> Advise the traveling public of impending construction activities (e.g. information signs, portable message signs, media listing/notification, implementation of an approved traffic control plan. Timely notification of construction schedules to all affected agencies (e.g. Gold Coast Transit, Police Department, Fire Department, Public Works Department, and Planning and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet. Coordination of construction work with affected agencies in advance of start of work. Approval by the Public Works Department of any haul routes, for earth, concrete or construction materials and equipment handling. 								

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GLOBAL CLIMATE CHANGE								
GCC-1 Global Climate Change. The following design features shall be incorporated. <ul style="list-style-type: none">• New buildings within the Hospital District will have bicycle parking;• The Hospital District includes transit stops for planned routes;• New buildings within the Hospital District will utilize Energy Star roofs and Energy Star appliances;• New buildings within the Hospital District will comply with Title 24	Applicant PCD	Twice. Once prior to construction and once prior to occupancy	PCD	Applicant	Implementation of specified features			

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