PUBLIC REVIEW DRAFT

SIERRA POINT BIOTECH PROJECT ENVIRONMENTAL IMPACT REPORT

TECHNICAL APPENDICES

STATE CLEARINGHOUSE #2006012024

LSA

November 2006

PUBLIC REVIEW DRAFT

SIERRA POINT BIOTECH PROJECT ENVIRONMENTAL IMPACT REPORT

TECHNICAL APPENDICES

STATE CLEARINGHOUSE #2006012024

Submitted to:

City of Brisbane
50 Park Place
Brisbane, CA 94005-1310

Prepared by:

LSA Associates, Inc.
2215 Fifth Street
Berkeley, CA 94710
510.540.7331

LSA

November 2006

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APPENDIX A

NOTICE OF PREPARATION AND COMMENTS RECEIVED

Appendix A-1

Notice of Preparation

NOTICE OF PREPARATION

To:

From: City of Brisbane
Community Development Dept
50 Park Place
Brisbane, CA 94005

Subject: **Notice of Preparation of a Draft Environmental Impact Report**

The City of Brisbane Planning Department will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project.

Project Description: Cases GP-2-05, RZ-2-05, DP-6-05, ER-3-05: Proposal by Slough International to construct an approximately 540,000 square foot biotech Research and Development complex consisting of five buildings, a six level parking structure, 2,500 square foot retail space, surface parking and open space on approximately 22 acres at Sierra Point, generally easterly of Shore Line Court and southerly of Sierra Point Parkway. The proposal involves amending the General Plan to permit Research and Development uses within the Sierra Point Commercial/Retail/Office land use designation, amending the Sierra Point Commercial Zoning District to permit Research and Development uses, including standards for animal testing, amending the approved Sierra Point design guidelines, and project design approval.

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

Notice is further given that a public meeting will be held by the City of Brisbane Planning Commission on **Thursday, January 12, 2005 at 7:30 p.m. in the Brisbane Community Center, 250 Visitacion Avenue, Brisbane** to consider the initial study and scope of the forthcoming DEIR.

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

Please send your response to John Swiecki, Principal Planner, at the address shown above. We will need the name of a contact person in your agency.

Date: January 4, 2006

Signature
Title: Principal Planner
Telephone: 415.508.2120

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold
Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

January 9, 2006

To: Reviewing Agencies

Re: Sierra Point Research and Development Complex
SCH# 2006012024

Attached for your review and comment is the Notice of Preparation (NOP) for the Sierra Point Research and Development Complex draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

John A. Swiecki
City of Brisbane
50 Park Place
Brisbane, CA 94005

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call tbe State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2006012024
Project Title Sierra Point Research and Development Complex
Lead Agency Brisbane, City of

Type NOP Notice of Preparation

Description Proposed approximately 540,000 square foot biotech research and development complex consisting of five buildings, a six level parking structure, 2,500 square foot retail space, surface parking and open space on approximately 22 acres. The proposal involves amending the General Plan to permit Research and Development uses within the Sierra Point Commercial/Retail/Office land use designation, amending the Sierra Point Commercial Zoning District to permit Research and Development uses, including standards for animal testing, amending the approved Sierra Point design guidelines, and project design approval.

Lead Agency Contact

Name John A. Swiecki
Agency City of Brisbane
Phone (415) 508-2120 **Fax**
email
Address 50 Park Place
City Brisbane **State** CA **Zip** 94005

Project Location

County San Mateo
City Brisbane
Region
Cross Streets Shoreline Court/Sierra Point Parkway
Parcel No. 007-165-080, 090, 100
Township 3S **Range** 5W **Section** 14 **Base** MDB&M

Proximity to:

Highways 101
Airports None
Railways Southern Pacific
Waterways San Francisco Bay
Schools None
Land Use Vacant/Sierra Point Commercial/Sierra Point Commercial-Retail-Office

Project Issues Aesthetic/Visual; Air Quality; Drainage/Absorption; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Department of Water Resources; Department of Fish and Game, Region 3; Department of Health Services; Native American Heritage Commission; California Highway Patrol; Caltrans, District 4; Integrated Waste Management Board; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 2

Date Received 01/09/2006 **Start of Review** 01/09/2006 **End of Review** 02/07/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: San Mateo **SCH#** [illegible]

Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  David Johnson
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Gerald R. Zimmermen
- [ ] **Dept. of Conservation**
  Roseanne Taylor
- [ ] **California Energy Commission**
  Roger Johnson
- [ ] **Dept. of Forestry & Fire Protection**
  Allen Robertson
- [ ] **Office of Historic Preservation**
  Wayne Donaldson
- [x] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **Reclamation Board**
  DeeDee Jones
- [x] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [x] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou
- [ ] _____
  Conservancy

Fish and Game

- [ ] **Depart. of Fish & Game**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Game Region 1**
  Donald Koch
- [ ] **Fish & Game Region 2**
  Banky Curtis
- [x] **Fish & Game Region 3**
  Robert Floerke
- [ ] **Fish & Game Region 4**
  Mike Mulligan
- [ ] **Fish & Game Region 5**
  Don Chadwick
  Habitat Conservation Program
- [ ] **Fish & Game Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] **Fish & Game Region 6 I/M**
  Tammy Allen
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- [x] **Dept. of Health Services**
  Veronica Rameriz
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Debby Eddy
- [ ] **Office of Emergency Services**
  Dennis Castrillo
- [ ] **Governor's Office of Planning & Research**
  State Clearinghouse
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [ ] **Public Utilities Commission**
  Ken Lewis
- [ ] **State Lands Commission**
  Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- [ ] **Caltrans - Planning**
  Terri Pencovic
- [x] **California Highway Patrol**
  John Olejnik
  Office of Special Projects
- [ ] **Housing & Community Development**
  Lisa Nichols
  Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jeckman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Katherine Eastham
- [x] **Caltrans, District 4**
  Tim Sable
- [ ] **Caltrans, District 5**
  David Murray
- [ ] **Caltrans, District 6**
  Marc Birnbaum
- [ ] **Caltrans, District 7**
  Cheryl J. Powell
- [ ] **Caltrans, District 8**
  Dan Kopulsky
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Mario Orso
- [ ] **Caltrans, District 12**
  Bob Joseph

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
  - [ ] Transportation Projects
    Kurt Karperos
  - [ ] Industrial Projects
    Mike Tollstrup
- [x] **California Integrated Waste Management Board**
  Sue O'Leary
- [ ] **State Water Resources Control Board**
  Jim Hockenberry
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Steven Herrera
  Division of Water Rights
- [x] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [x] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Jonathan Bishop
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____

Last Updated on 08/10/05

Appendix A-2

Comments Received in Response to the Notice of Preparation

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

Flex your power!
Be energy efficient!

January 11, 2006

SM101419
SCH#2006012024

Mr. John Swiecki
Principal Planner
City of Brisbane
Community Development Department
50 Park Place
Brisbane, CA 94005

Dear Mr. Swiecki:

SIERRA POINT RESEARCH & DEVELOPMENT COMPLEX - NOTICE OF PREPARATION

Thank you for including the California Department of Transportation (Department) in the early stages of the environmental review process for the Sierra Point Research & Development complex. The following comments are based on the Notice of Preparation.

Traffic Analysis
Please include the information detailed below in the Traffic Impact Study (TIS) to ensure that project-related impacts to State roadway facilities are thoroughly assessed. We encourage the City to coordinate preparation of the study with our office, and we would appreciate the opportunity to review the scope of work. The Department's *"Guide for the Preparation of Traffic Impact Studies"* should be reviewed prior to initiating any traffic analysis for the project; it is available at the following website:
http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

The TIS should include:

1. Site plan clearly showing project access in relation to nearby state roadways. Ingress and egress for all project components should be clearly identified. State right-of-way (ROW) should be clearly identified.

2. Project-related trip generation, distribution, and assignment. The assumptions and methodologies used to develop this information should be detailed in the study, and should be supported with appropriate documentation.

3. Average Daily Traffic, AM and PM peak hour volumes and levels of service (LOS) on all significantly affected roadways, including crossroads and controlled intersections for existing, existing plus project, cumulative and cumulative plus project scenarios. Calculation of cumulative traffic volumes should consider all traffic-generating developments, both existing and future, that would affect study area roadways and intersections. *The analysis should clearly identify the project's contribution to area traffic and degradation to existing and cumulative levels of service. Lastly, the Department's LOS threshold, which is the transition between LOS C and D, and is explained in detail in the Guide for Traffic Studies, should be applied to all state facilities.*

4. Schematic illustration of traffic conditions including the project site and study area roadways, trip distribution percentages and volumes as well as intersection geometrics, i.e., lane configurations, for the scenarios described above.

5. The project site building potential as identified in the General Plan. The project's consistency with both the Circulation Element of the General Plan and the San Mateo County Congestion Management Agency's Congestion Management Plan should be evaluated.

6. *Mitigation should be identified for any roadway mainline section or intersection with insufficient capacity to maintain an acceptable LOS with the addition of project-related and/or cumulative traffic.* The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should also be fully discussed for all proposed mitigation measures.

7. Special attention should be given to the following trip-reducing measures:
   - Encouraging mixed-use,
   - Maximizing density through offering bonuses and/or credits,
   - Coordinating with SamTrans, Caltrain and BART to increase transit/rail use by expanding routes and emphasizing express service to regional rail stations, and by providing bus shelters with seating at any future bus pullouts,
   - Providing transit information to all future project employees and patrons, and
   - Encouraging bicycle- and pedestrian-friendly design.

While the 2000 Highway Capacity Manual (HCM) may not be the preferred level of service methodology, it should be used for analyzing impacts to state facilities, particularly where previous analysis employing alternative methodologies has identified impacts. The residual level of service, assuming mitigation has been implemented, should also be analyzed with HCM 2000.

Encroachment Permit

Please be advised that work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process.

See the following website link for more information:
http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Please forward a copy of the City's Transportation Demand Management policy with the environmental document and TIS, including Technical Appendices, to the address below as soon as they are available.

Patricia Maurice, Associate Transportation Planner
Community Planning Office, Mail Station 10D
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

HEALTH DEPARTMENT

January 17, 2006

John Swiecki
City of Brisbane
Community Development Dept
50 Park Place
Brisbane, CA 94005

Dear Mr. Swiecki:

I recently received your Notice of Preparation of a draft Environmental Impact Report (EIR) for the project location at Sierra Point, Brisbane, CA – APN 007-165-080,090,100. Hazards and Hazardous Materials are one of the listed environmental factors affected by the project, therefore the San Mateo County Dept of Environmental Health (SMCoEH) would take interest in reviewing the draft EIR. For future reference, I will be the contact person representing SMCoEH in this matter. Please forward any future correspondence and drafts to:

Waymond Wong
455 County Center (EHS126)
Redwood City, CA 94063

If there are any further questions or comments, please contact me at 650-363-4828.

Sincerely,

Waymond Wong
Hazardous Materials Specialist

Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

January 30, 2006

Mr. John A. Swiecki
City of Brisbane
50 Park Place
Brisbane, California 94005

Dear Mr. Swiecki:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) and Initial Study for the Sierra Point Research and Development Complex (the "Project") draft Environmental Impact Report (EIR) (SCH# 2006012024). As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code (HSC), Division 20, Chapter 6.8. As a Resource Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project under the California Environmental Quality Act (CEQA) adequately addresses any remediation activities pertaining to releases of hazardous substances.

The Project site is located at Sierra Point, a former landfill. According to the City of Brisbane General Plan, methane gas and water quality at this former landfill are monitored on a regular basis (quarterly, according to California Integrated Waste Management Board records). In the 1980s, a 102-acre office park and 30-acre municipal marina were constructed at Sierra Point. The current Project, which will occupy approximately 22 acres, includes a 540,000 square foot biotech research and development complex with five buildings, a six-level parking structure, 2500 square foot retail space, surface parking and open space.

The Initial Study for the Project indicates that potentially significant impacts are expected from 1) the routine transport, use, or disposal of hazardous materials, and 2) reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. According to the Initial Study, these impacts are related to the use of hazardous substances in the completed research and development complex, and they will be addressed in the draft EIR.

However, the Initial Study makes no mention of potential impacts from hazardous substances placed in the landfill that may be exposed by Project construction activities. DTSC strongly recommends that the draft EIR include a thorough description of landfill history and the materials contained within the landfill. The post-closure monitoring data

should also be reviewed. This information can be used to assess whether hazardous substances have been released at the Site. Based on this information, sampling should be conducted to determine whether there is an issue that will need to be addressed in the CEQA compliance document.

If hazardous substances have been released, they will need to be addressed as part of this project. For example, if remediation activities at the Site include the need for soil excavation, the CEQA compliance document should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust levels and noise; (3) transportation impacts from the removal or remedial activities; and (4) risk of public upset should be there an accident at the Site.

If you have any questions or would like to schedule a meeting, please contact Allan Fone of my staff at (510)540-3836. Thank you in advance for your cooperation in this matter.

Sincerely,

Denise M. Tsuji, Unit Chief
Northern California - Coastal Cleanup
Operations Branch

cc: Governor's Office of Planning and Research
State Clearinghouse
P. O. Box 3044
Sacramento, CA 95812-3044

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Sabra Ambrose
California Integrated Waste Management Board
P.O. Box 4025
Sacramento, California 95812-4025

cc: Waymond Wong
San Mateo County Health Department, Environmental Health Division
455 County Center, 4th Floor
Redwood City, California 94063

Anders Lundgren
San Francisco Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

February 8, 2006

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

John Swiecki
Brisbane Community Development Dept.
50 Park Place
Brisbane, CA 94005

Subject: Slough International Biotech Research and Development Project

Dear Mr. Swiecki:

Bay Area Air Quality Management District (District) staff have reviewed your agency's Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for a 540,000 square foot biotech Research and Development complex ("project") proposed by Slough International. The project also includes 2,500 square feet of retail space and approximately 1,800 parking spaces.

The Bay Area is currently a non-attainment area for national and State ambient air quality standards for ground level ozone and State standards for particulate matter. The air quality standards for these "criteria pollutants" are set at levels to protect public health and welfare.

The District has the following specific comments on the environmental analysis that should be included in the DEIR.

1. The *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans (1999)* provide guidance on how to evaluate a project's construction, operational and cumulative impacts. You may obtain a copy by calling our Public Information Division at (415) 749-4900 or downloading the online version from the District's web site at: http://www.baaqmd.gov/pln/ceqa/index.htm.

2. The DEIR should provide background information regarding the District's attainment status for all criteria pollutants and the implications for the region if these standards are not attained by statutory deadlines. In addition, a discussion of the U.S. EPA's current proposal to amend national health based particulate matter standards should be discussed. A discussion of the health effects of air pollution, especially on sensitive receptors, should be provided.

3. The DEIR should provide a detailed analysis of the project's potential effects on local and regional air quality from construction, operations and cumulative impacts. Estimate daily and annual VOC, NOx, CO, and PM_{10} emissions from stationary, area and mobile sources resulting from long-term operation of this project and compare to the significance criteria in the *BAAQMD CEQA Guidelines*. Evaluate the potential impacts of toxic air contaminants on sensitive receptors as a result of project implementation.

4. The DEIR should include a qualitative discussion of construction impacts. For informational purposes, we recommend that the DEIR also include a quantitative analysis of the criteria pollutant emissions that would be generated from construction equipment exhaust during project construction. Construction generates fugitive dust emissions, criteria pollutants, and toxic air contaminant emissions from construction equipment. The project should be required to comply with the dust mitigation measures in the District's CEQA Guidelines. We also encourage the City to include a mitigation measure requiring the implementation of all feasible measures that reduce construction equipment exhaust emissions. Such measures could include but are not limited to: maintaining properly tuned engines; minimizing the idling time of diesel powered construction equipment to three minutes; using alternative powered construction equipment (i.e., CNG, biodiesel, water emulsion fuel, electric); using add-on control devices such as diesel oxidation catalysts or particulate filters; using diesel construction equipment that meets the ARB's 2000 or newer certification standard for off-road heavy-duty diesel engines; phasing the construction of projects; and limiting the hours of operation of heavy duty equipment.

5. If the project is found to have potentially significant impacts on air quality, we recommend that the DEIR evaluate and recommend all feasible mitigation measures that can reduce project emissions. These could include TDM strategies, such as providing: shuttle service, transit information and shelters, a guaranteed ride home program, and subsidized transit passes. We also recommend that the City require that the project developer and/or tenants charge for parking to reduce the demand for driving and to offer employees a parking cash-out program to encourage them to carpool or take transit. The project could also reduce area source emissions by utilizing only electric or natural gas forklifts and landscaping equipment in the project operations and the operations of tenants. The DEIR should provide an analysis of all mitigation measures considered, and justification for those measures not considered feasible.

6. The DEIR should evaluate the project's potential to increase the demand for energy in the City. Increasing the demand for electricity, natural gas, and gasoline may result in an increase of criteria air pollutant emissions from combustion, as well as an increase in greenhouse gas emissions, which can impact regional air quality. We recommend that the DEIR discuss energy demand of the project at build-out, including any cumulative impacts, such as the need to build "peaker power plants" to provide power during peak demand. When identifying strategies to minimize the project's impact on energy and air quality, the District encourages the City to include mitigation measures that would require the development to incorporate a minimum level of green building measures. This minimum level could be based on the Leadership in Energy and Environmental Design (LEED) standards or by setting a target percentage reduction below California Building Code's Title 24 energy standards. Green building measures could include but are not limited to using: super-efficient heating, ventilation, and air conditioning (HVAC) systems; light-colored and reflective roofing materials, pavement treatments and other energy efficient building materials; shade trees adjacent to buildings; photovoltaic panels on buildings; and natural light and energy-efficient lighting.

If you have any questions regarding these comments, please contact Douglas Kolozsvari, Environmental Planner, at (415) 749-4602.

Sincerely,

Jean Roggenkamp
Deputy Air Pollution Control Officer

JR:DK

cc: BAAQMD Director Jerry Hill
BAAQMD Director Marland Townsend

COMMENT SHEET

Brisbane Planning Department, 50 Park Place, Brisbane, CA 94005
Contact: John Swiecki, Principal Planner (415) 508-2120/FAX (415) 467-5547

[X] Public Works—Randy Breault
[ ] Building—Doug Rider
[ ] Asst. to the City Mgr. (tree regs.)—Fred Smith
[ ] Police--Tom Hitchcock
[ ] North County Fire Authority—Bob Marshall
[ ] Parks & Rec—Jim Skeels
[ ] San Mateo County Env. Health Div.
[ ] Marina- Ted Warburton

ADDRESS: **Sierra Point Biotech Complex**
PROJECT: **GP-2-05, RZ-2-05, UP-14-05, DP-6-05, ER-3-05 : Proposed biotech office complex with approximately 540,000 square feet of space within five buildings 3-4 stories in height, a six-level parking structure, surface parking and open space on approximately 22 acres easterly of Shore Line Court and southerly of Sierra Point Parkway.**
APPLICANT: **Slough Estates**
DATE DISTRIBUTED: **11/04/05** RESPONSE DEADLINE: **11/23/05**

The Planning Department anticipates that an Environmental Impact Report will be prepared for this project. In order to proceed with the environmental review process, please respond to the following:

What additional information is required to evaluate this proposal?
[X] None. [ ] See Comments.
NOTE: *Requests for additional data must be made within 30 days of application submittal--please contact the Planning Department immediately.*

What specific concerns does this project raise that should be addressed in the forthcoming EIR?
[X] None. [ ] See Comments.

Note that your agency will be afforded the opportunity to review and comment on the EIR, and to recommend conditions of approval for the project before it is considered by the Planning Commission.

Comments: Note: DPW has previously advised the applicant's engineer that water service is available for this project; however, the conceptual utility plan (Sheet C-3) is not consistent w/ previously approved site utility Master Plans and City Master Plans and current policies. Final approval of the utility plans is subject to review and approval by the City Engineer.

Signature: [signature] Date: 11/21/05

COMMENT SHEET

Brisbane Planning Department, 50 Park Place, Brisbane, CA 94005
Contact: John Swiecki, Principal Planner (415) 508-2120/FAX (415) 467-5547

[ ] Public Works—Randy Breault
[ ] Building—Doug Rider
[ ] Asst. to the City Mgr. (tree regs.)—Fred Smith
[ ] Police--Tom Hitchcock
[X] North County Fire Authority—Bob Marshall
[ ] Parks & Rec—Jim Skeels
[ ] San Mateo County Env. Health Div.
[ ] Marina- Ted Warburton

ADDRESS: **Sierra Point Biotech Complex**
PROJECT: **GP-2-05, RZ-2-05, UP-14-05, DP-6-05, ER-3-05 : Proposed biotech office complex with approximately 540,000 square feet of space within five buildings 3-4 stories in height, a six-level parking structure, surface parking and open space on approximately 22 acres easterly of Shore Line Court and southerly of Sierra Point Parkway.**
APPLICANT: **Slough Estates**
DATE DISTRIBUTED: **11/04/05** RESPONSE DEADLINE: **11/23/05**

The Planning Department anticipates that an Environmental Impact Report will be prepared for this project. In order to proceed with the environmental review process, please respond to the following:

What additional information is required to evaluate this proposal?
[ ] None. [X] See Comments.
NOTE: *Requests for additional data must be made within 30 days of application submittal--please contact the Planning Department immediately.*

What specific concerns does this project raise that should be addressed in the forthcoming EIR?
[ ] None. [X] See Comments.

Note that your agency will be afforded the opportunity to review and comment on the EIR, and to recommend conditions of approval for the project before it is considered by the Planning Commission.

Comments: Hazardous Materials used on Premises May Alter Construction Types allowed. Please Respond as to Materials that May be used & indicate Potential Occupancy Classes of all Buildings

Signature: R T Huff Date: 11/15/05

COMMENT SHEET

Brisbane Planning Department, 50 Park Place, Brisbane, CA 94005
Contact: John Swiecki, Principal Planner (415) 508-2120/FAX (415) 467-5547

[ ] Public Works—Randy Breault
[ ] Building—Doug Rider
[ ] Asst. to the City Mgr. (tree regs.)—Fred Smith
[ ] Police--Tom Hitchcock
[ ] North County Fire Authority—Bob Marshall
[ ] Parks & Rec—Jim Skeels
[ ] San Mateo County Env. Health Div.
[X] Marina- Ted Warburton

ADDRESS: **Sierra Point Biotech Complex**
PROJECT: **GP-2-05, RZ-2-05, UP-14-05, DP-6-05, ER-3-05 : Proposed biotech office complex with approximately 540,000 square feet of space within five buildings 3-4 stories in height, a six-level parking structure, surface parking and open space on approximately 22 acres easterly of Shore Line Court and southerly of Sierra Point Parkway.**
APPLICANT: **Slough Estates**
DATE DISTRIBUTED: **11/04/05** RESPONSE DEADLINE: **11/23/05**

The Planning Department anticipates that an Environmental Impact Report will be prepared for this project. In order to proceed with the environmental review process, please respond to the following:

What additional information is required to evaluate this proposal?
[ ] None. [ ] See Comments.
NOTE: *Requests for additional data must be made within 30 days of application submittal--please contact the Planning Department immediately.*

What specific concerns does this project raise that should be addressed in the forthcoming EIR?
[ ] None. [ ] See Comments.

Note that your agency will be afforded the opportunity to review and comment on the EIR, and to recommend conditions of approval for the project before it is considered by the Planning Commission.

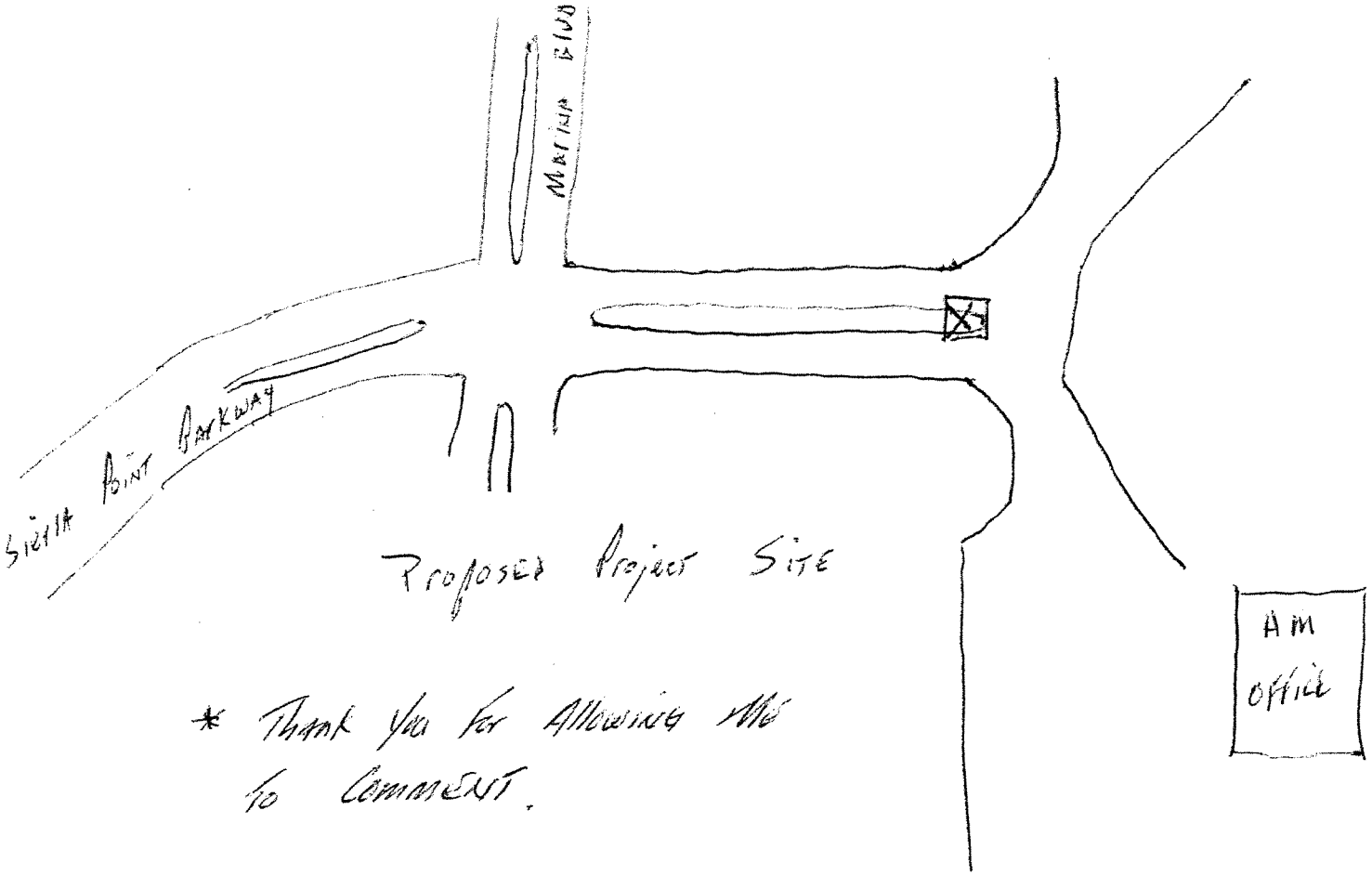
Comments: (1) The very strong westerly winds will discourage outdoor congregations and should be relocated accordingly. (2) View corridors should be preserved towards the 2 marinas to the south

Signature: _____ Date: 11/17/05

AND to Brisbane Marina to the West, (3) The Parking Garage is located, in my opinion, AT A desireable View location for A building. I would move & exchange the Parking Garage with Building B or C.

(4). NOTE: the SITE has Mostly SOUTHEASTERLY SOLAR Exposure during ~~AUG~~, the entire year that will Affect Vegetation, Energy & Human outdoor use.

(5) As A Condition of this Permit Can we Get A Monument Sign for the Marina? It should be located As follows:



* Thank You for Allowing Me to Comment.

Sierra Point Yacht Club
500 Sierra Point Parkway Brisbane, CA 94005
650/952-0651

January 26, 2006

John Swiecki
Principal Planner
City of Brisbane
50 Park Place
Brisbane, CA 94005

Dear Mr. Swiecki:

The subject of this letter is the Slough International Proposal – Cases GP-2-05, RZ-2-05, DP-6-05, ER-3-05.

The members of the Sierra Point Yacht Club have a number of concerns about this proposal, the major one being the mitigation of construction dust dirt and debris. The project is proposed in an area that often has winds 15 to 30 miles an hour. These winds carry over the property then over the yacht club, marina, our members cars and boats and then to the bay. A couple of years ago we had a severe problem with the amount of dust and dirt blowing from the proposed project's property. This has diminished since the owners of the property or their lessees have not been not been storing and reconfiguring dirt from other construction sites on the property.

The proposed project is going to generate this dust and dirt again and generate large amounts of construction dust and debris. We are concerned about the effect this will have on our building and on our members boats in the Brisbane Marina. We just painted our building two years ago and don't wish to do it again in the near future. Also the amount of dirt entering our building due to the project will have negative effects.

Dust and dirt is a major concern to all of our members and to all the tenants of the marina. Construction debris and especially concrete dust is extremely detrimental to boats. Concrete dust settling on a boat's topsides and then getting dampened with dew every evening sets it like what it is – concrete.

At most risk are sailboats, all the standing rigging (stays and shrouds) and running rigging, (lines and ropes) are in jeopardy. Dirt adhering to the stainless steel standing rigging collects and holds moisture thus promoting corrosion. Dirt infiltrating the running rigging is even more of a problem. Once the infiltration occurs the dirt becomes an

abrasive and causes increased wear and shortened life. These lines cost any where from $1.00 to $6.00 a foot. A small sailboat my carry 500 feet of line while a larger one may carry 1,500 to 2,000 feet.

Dust and dirt has the same effect on the fabric covers on all the boats as it does on the lines of the sailboats.
We are especially concerned with any dust and debris that carries into the bay as to the environmental impact that may have on the bay itself.

Other concerns we have are access to the marina, traffic, and noise but feel these will not have the physical and lasting effects on the property of the yacht club, its members or marina tenants as the construction dirt and debris will have.

Please keep me advised of the progression of this proposal.

Respectfully,

Bill Martinelli

Bill Martinelli
Commodore
Sierra Point Yacht Club

TO: PLANNING COMMISSION
FROM: DANA DILLWORTH
RE: 1000-3900 SIERRA POINT PARKWAY, 1/12/06
JANUARY 11, 2006

Regarding public response to this posting, please include by reference, the articles, letters, public comment and e-mails received in the course of testimony on Ordinance 501's changes to research and development definitions. Since council members incorrectly closed discussion of this matter when members of the public asked to speak, I ask that their comments be included in this proceeding.

Please include, but not be limited to, the following:

Articles
"There is No Good Way to Spin Plague," Herald News
"Extending Life," Jill Kramer, Marin News
"Monkey Business," "Animal Instincts," SF Bay Guardian 9/28/05
"Vivisection" 15-pg article from Vivisectioninfo.org

Opinions
Dr. Dale Bredesen, Buck Institute
Shalin Gala, PETA, Abuses
Ken White, Peninsula Humane Society 7/11/05, 3"R's"
Matt Rossell, IDA, 6/29/05, Oregon Lab Experience
Jo Chamberlain, Green Party, 7/15/05, Party Platform
Crystal Miller-Spiegel, 6/22/05, Laws and AALAC Recommendation
Marcia Kramer, 6/21/05, NAVS, Laws and research
Coleen Mackin, 7/4/05

Public Comments
Dr. Elliott Katz, residents, etc.,
BrsNet comments: MaKoo Yio,
including e-mails sent to city.

Technology Review
AN MIT ENTERPRISE

Tuesday, December 20, 2005

Can EPA Regulate Nano?

Monitoring complex new nanotech materials may be too much for the agency to handle.

By Kevin Bullis

While much nanotech is still in its early stages and far from marketable, experts now estimate that nano-engineered materials have found their way into as many as 700* products. That growing presence is lending an urgency to learning what environmental and health effects these novel materials may have -- and to regulate them accordingly.

In fact, the fate of a host of industries, spanning every sector of the economy, may depend on whether or not regulators get it right. But as things stand now, according to many industry-watchers, the necessary resources to oversee this burgeoning new field just aren't there.

In early December, the U.S. Environmental Protection Agency released a draft white paper (http://www.epa.gov/osa/nanotech.htm) on nanotechnology that identifies gaps in scientists' understanding of the environmental and health effects of nanotechnology. According to Andrew Maynard (http://www.nanotechproject.org/index.php?id=9), a senior science advisor at the nonpartisan Woodrow Wilson Institute in Washington, DC, it provides what may be the most comprehensive collection yet of researchers' concerns, balanced with an analysis of the numerous ways nanotechnology could help the environment and human health.

Yet the sheer breadth of these concerns suggests that regulating nanotech may be a task far beyond the capacity of a single government program, says Maynard. The EPA hasn't settled on how it will regulate nano-engineered materials, but the substances will probably come under the purview of environmental laws already on the books and draw on the agency's existing funding -- which many critics say is far from adequate.

The EPA program will likely take primarily responsibility for regulating nanotechnology, since the Office of Pollution Prevention and Toxics lacks the funding and personnel for the field offices necessary to monitor manufacturing, says Mark Greenwood (http://www.nanotechproject.org/index.php?id=9), a former senior EPA toxicology official, now a partner in a Washington, DC, law firm specializing in environmental law.

If the EPA is not up to the challenge, it could mean that some nano-enabled products that turn out to be unsafe make it into the marketplace. The fear among the proponents of nanotech's benefits is that health problems linked to just one such product may lead to a consumer backlash against all nanotechnology. And that could lead to the loss of not only billions of dollars in profits and wasted R&D, but also a loss of nanotech-based products that could have health and environmental benefits, such as ones for reducing the side effects from cancer treatment or quickly cleaning up toxic waste sites.

To be sure, nanotechnology poses a regulatory challenge. Many nanoparticles are made of the same basic

chemicals as current products that have already been regulated. But their new physical structures -- which make them so appealing for new applications -- also give them highly different properties.

Pure carbon, for example, is used as graphite in pencil lead; and, arranged differently, it becomes a diamond. In the world of nananotechnology carbon is transformed into soccer-ball-shaped fullerenes, and their close relatives, nanotubes. The latter have properties that make them appealing for applications as diverse as high-performance computing, photovoltaics, and drug delivery. However, these properties and dimensions may also make them dangerous, if they get into air or water.

If all fullerenes were the same, it would be a relatively straightforward task to learn how they affect humans and the environment, researchers say. But they aren't. Different manufacturing methods can produce widely varying products with, for example, different amounts of impurities. Further, researchers continue to alter the surfaces of these particles to create new properties.

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*This figure is cited in an Environmental Law Institute publication, "Securing the Promise of Nanotechnology: Is U.S. Environmental Law Up to the Job?" Estimates of the number of products varies. A representative from the National Nanotechnology Initiative has cited EmTech Research (a subsidiary of Small Times) data showing there are approximately 80 consumer products containing nano-engineered materials and more than 600 raw materials, intermediate materials (such as coatings), electronics components and sensors, drug delivery technologies, research tools, process tools, and software tools.

The differences among varieties of fullerenes, for instance, may be the reason behind some recent, seemingly contradictory research results, says Richard Denison (http://www.environmentaldefense.org/aboutus.cfm?subnav=expert&contentid=3092), a senior scientist at Environmental Defense (formerly the Environmental Defense Fund) in Washington, DC. Some research shows that fullerenes are powerful anti-oxidants, possibly useful for improving the health of cells by neutralizing free radicals. In contrast, other research seems to show that they're powerful oxidants, capable of working their way into the brain and damage cell membranes.

If regulations were to be based only on the research indicating potentially dangerous properties, consumers might never see the health benefits of some fullerenes. Alternatively, if the wrong type of fullerene were used as an anti-oxidant, it could also do damage.

Here's where the policy issue arises: If the effort at regulation is underfunded, it may not ferret out these distinctions, Maynard and others say. On the other hand, if the field of nanotechnology is over-regulated, it could stifle innovation and prevent new products from coming to market. Yet of course there needs to be an adequate level of research and regulation, to prevent the destruction of ecosystems and also head off a possible consumer backlash that would stifle progress. "We can't afford to get it wrong," says Maynard. "If something does go wrong, not only will this put human health and the environment at risk, it will put businesses at risk."

Former EPAer Greenwood says the Office of Pollution Prevention and Toxics, which is charged with administering the Toxic Substances Control Act, is likely to be regulating nanotechnology. This program, which reviews new chemicals and enforces quality controls on existing chemicals, is "woefully underfunded," says Greenwood, especially over the last several years. "I don't think that the current program is capable of dealing with the complexity, the variety, and the data needs of nanotechnology, unless they get a big infusion of resources," he says.

Denison concurs. Environmental Defense has suggested that 10 percent of the budget for the National Nanotechnology Initiative, which involves* about one billion dollars in federal money spent by a range of

agencies, be earmarked for studying the environmental, social, and health implications of new nanomaterials. Other groups have suggested that even more be spent. Currently, no more than four percent of the money goes for such research.

In addition to greater funding, Denison says, some group would need to coordinate the efforts of multiple agencies more than is the case now. The size of the problem may require international cooperation, he claims: "The magnitude of the research that really needs to be done is probably beyond what any single country could do."

As regulations are imposed, it will likely affect small nanotechnology startups. Materials testing could be too time consuming and expensive. Since some regulation is inevitable and necessary, though, such innovative startups may need to develop partnerships with other, larger companies to meet regulatory requirements.

Another possibility is a government- or an industry-sponsored fund to help such companies jump through the regulatory hoops necessary before their products can start making a profit.

"There's a window of opportunity here for maintaining the ability of this technology to deliver the benefits it promises and for building public trust," Denison says. But he warns that the task will be difficult. "I think we've got a really fine balancing act."

*The story originally indicated that the NNI allocates the money. The money is technically allocated by Congress.

External Review Draft Nanotechnology White Paper

Prepared for the U.S. Environmental Protection Agency by members of the Nanotechnology Workgroup, a group of EPA's Science Policy Council

Science Policy Council
U.S. Environmental Protection Agency
Washington, DC 20460

External Review Draft Document, December 2, 2005
(PDF, 738KB, 134 pages, About PDF)

Nanotechnology is the science of manipulating materials at the atomic and molecular level to develop new or enhanced materials and products.

In December 2004, EPA's Science Policy Council created a cross-Agency workgroup to identify and describe the issues EPA must address to ensure protection of human health and the environment as this new technology is developed. The draft white paper on nanotechnology is the product of the workgroup.

The draft white paper describes the technology, and provides a discussion of the potential environmental benefits of nanotechnology and its applications that can foster sustainable use of resources. Risk management issues and the Agency's statutory mandates are outlined, followed by an extensive discussion of risk assessment issues. The paper identifies research needs for both environmental applications and implications of nanotechnology and concludes with recommendations on next steps for addressing science policy issues and research needs. Supplemental information is provided in a number of appendices.

The Agency will use the white paper to address research needs and risk assessment issues concerning nanotechnology. The draft white paper will undergo independent expert review, which will be conducted in the February 2006 time frame. Public comments will be accepted prior to the meeting of the external peer review panel. All comments received by January 31, 2006 will be shared with the external peer review panel for their consideration. Comments received beyond that time will be considered by EPA. Comments on this document may be submitted and reviewed using the e-Government www.regulations.gov web site beginning Wednesday, December 21, 2005. From the site, select '**Environmental Protection Agency**' and enter the keyword '**EPA-HQ-ORD-2005-0504**' for the docket ID. The system is an "anonymous access" system, which means EPA will not know your identity, e-mail address, or other contact information unless you provide it in the body of your comment.

Executive Summary of the External Review Draft

Nanotechnology has the potential to change and improve many sectors of American industry, from consumer products to health care to transportation, energy and agriculture. In addition to these societal benefits, nanotechnology presents new opportunities to improve how we measure, monitor, manage, and minimize contaminants in the environment, and the U.S. Environmental Protection Agency (EPA, or "the Agency") will continue to support and advance these opportunities. However, as the applications of nanotechnology continue to expand, EPA also has the obligation and mandate to protect human health and safeguard the environment by better understanding and addressing potential risks from exposure to materials containing nano-scale particles (commonly known as "nanomaterials").

For the past five years, EPA has played a leading role in funding research and setting research directions to develop environmental applications for, and understand the potential human health and environmental implications of, nanotechnology. That research has already borne fruit, particularly in the use of nanomaterials for environmental clean-up and in understanding the disposition of nanomaterials in biological systems. Some environmental technologies using nanotechnology have progressed beyond the research stage. Also, a number of specific nanomaterials have come to the Agency's attention, whether as novel products intended to promote the reduction or remediation of pollution or because they have entered one of EPA's regulatory review processes. For EPA, nanotechnology has evolved from a futuristic idea to watch, to a current issue to address.

In December 2004, EPA's Science Policy Council created a cross-Agency workgroup charged with describing the issues EPA must address to ensure that society accrues the important benefits to environmental protection that nanotechnology may offer, as well as to better understand any potential risks from exposure to nanomaterials in the environment. This paper is the product of that workgroup.

The paper begins with an introduction that describes what nanotechnology is, why EPA is interested in it, and what opportunities and challenges exist regarding nanotechnology and the environment. It then moves to a discussion of the potential environmental benefits of nanotechnology, describing environmental technologies as well as other applications that can foster sustainable use of resources. Following is a brief section on risk management and the Agency's statutory mandates, which sets the stage for a discussion of risk assessment issues specific to nanotechnology. The paper then provides an extensive review of research needs for both environmental applications and implications of nanotechnology. To help EPA focus on priorities for the near term, the paper concludes with recommendations on next steps for addressing science policy issues and research needs. Supplemental information is provided in a number of appendices.

Key recommendations include:

- **Pollution Prevention, Stewardship, and Sustainability.** The Agency should engage resources and expertise to encourage, support, and develop approaches that promote pollution prevention, sustainable resource use, and good product stewardship in the production and use of nanomaterials. Additionally, the Agency should draw on new, "next generation" nanotechnologies to identify ways to support environmentally beneficial approaches such as green energy and green manufacturing.

- **Research.** The Agency should undertake, collaborate on, and catalyze research to better understand and apply information regarding nanomaterials':
    - chemical identification and characterization,
    - environmental fate,
    - environmental detection and analysis,
    - potential releases and human exposures,
    - human health effects assessment,
    - ecological effects assessment, and

- environmental technology applications.

- **Risk Assessment.** The Agency should conduct case studies on several engineered or manufactured nanomaterials. Such case studies would be useful in identifying unique considerations for conducting risk assessments on nanomaterials. The case studies would also aid in identifying information gaps, which would help map areas of research to inform the risk assessment process.

- **Collaboration and Leadership.** The Agency should continue and expand its collaborations regarding nanomaterial applications and potential human health and environmental implications.

- **Cross-Agency Workgroup.** The Agency should convene a standing cross-Agency group to foster information sharing on nanotechnology science and policy issues.

- **Training.** The Agency should continue and expand its nanotechnology training activities for scientists and managers.

Nanotechnology has emerged as a growing and rapidly changing field. New generations of nanomaterials will evolve, and with them new and possibly unforeseen environmental issues. It will be crucial that the Agency's approaches to leveraging the benefits and assessing the impacts of nanomaterials continue to evolve in parallel with the expansion of and advances in these new technologies.

From: Michelle Tsai <michsai@yahoo.com>
Subject: **Comment on Ord. 501 (Please include in public record.)**
Date: January 12, 2006 5:13:45 PM PST
To: cityhall@ci.brisbane.us

Hi,

Please include this comment on Ord. 501 in the public record for this item.

As a person who lives in the neighborhood near Brisbane, I can speak for most people that we do not want cruel and dangerous procedures being conducted in the area in the form of animal testing or weapons research. Nanotechnology is also a very dangerous enterprise when the nano-particles are released into the environment. These particles can wreak havoc considering what they are designed to do. If nanotechnology is to be used, stringent community regulation and unimpeded transparency must be in place.

Citizens are standing up and saying look, we do not need nor want bad practices in our neighborhood. As far as animal testing of pharmaceutical drugs goes, people are aware that such practices are not only cruel but essentially unnecessary and dangerously misleading to humans, and that there are humane, safer and realistically applicable human-based research methodologies to use. The only reason drugs are still tested on animals is because our federal government still requires it, and it is a convenient excuse for companies to use against liabillty. We as citizens know the dirty secrets of companies wanting to minimize liability as well as the government's bigotry. Such practices are not welcome here. Ending such practices is essential to the improvement of our environment, our health, and our values. Please do not let animal testing take place in our area.

Sincerely,
Michelle Tsai
3133 Frontera Way
Burlingame, CA 94010
Phone: (650) 619-9713

Technology Review
AN MIT ENTERPRISE

Wednesday, January 11, 2006

Regulating Nano

A new reports says laws don't protect public health and safety regarding all forms of nanotechnology.

By Associated Press

WASHINGTON (AP) -- Laws fall short in safeguarding the public's health and safety when it comes to the blossoming science of nanotechnology, according to report being issued Wednesday.

The new materials made through nanotechnology are finding their way into dozens of everyday products, from toothpaste to trousers, often without gaining the notice of regulators or consumers.

Few will say whether the nano materials, often hundreds of times smaller than the diameter of a human hair, are unquestionably safe or dangerous given the lack of definitive research into the matter. But Terry Davies, author of the report, said it's time to start discussing changing laws -- and perhaps drafting new ones -- to identify and protect the public from any risks that may crop up in the future.

"The technology is new but it's not so new that it's not being commercialized," said Davies, a senior adviser to the Project on Emerging Nanotechnologies at the Woodrow Wilson International Center for Scholars and a former Environmental Protection Agency official.

Nanotechnology involves the manufacture and manipulation of materials at the molecular or atomic level -- the smallest things get. At that scale, materials are measured in nanometers or billionths of a meter. Nanoscale materials, including particles used today in stain-resistant pants and suntan lotions, are generally less than 100 nanometers in diameter. A sheet of paper, in comparison, is a whopping 100,000 nanometers thick.

Nano boosters herald the potential for small-scale materials to have enormous effects on much of what we do, including develop drugs and sop up toxic pollution. Nano materials already are used in at least 80 consumer products made by U.S. companies, according to Small Times Magazine, which covers the nanotechnology industry.

U.S. regulatory agencies, including the EPA and Food and Drug Administration, say their regulatory options are adequate to cover nano-engineered materials, said Clayton Teague, director of the National Nanotechnology Coordination Office. Officials continue to evaluate the field as more studies are done, and updating the rules or adding ones now would be premature, he said.

"Until we have information that there are truly inadequacies in existing regulations, any additional regulations beyond what we already would have would be burdensome to industry and the advancement of the field," Teague said.

The sometimes unpredictable behavior of materials at the nanoscale does give some pause. Even seemingly subtle changes in the size of particles can precipitate wildly different changes in the basic properties of those

materials, including their toxicity.

Laws like the Clean Water Act or Toxic Substances Control Act lack either the authority or resources -- or both -- to adequately address those sorts of peculiarities inherent to nanotechnology, Davies said.

Others, like the Food, Drug and Cosmetic Act, are probably adequate when it comes to governing the safety of nano materials in food and drugs, the report said. But that act falls flat when it comes to cosmetics, which remain essentially unregulated by the FDA, Davies and others said.

"It's a list of things they can't do because the list of things they can do is practically nonexistent," Davies said.

Davies said he hopes the report will spark discussion, in part to help skirt the pitfalls that have befallen other emerging technologies.

"We've learned with biotech and nuclear power, if there are not adequate safeguards, the public is going to resist the technology and it won't meet its potential," Davies said.

On the Net:

Project on Emerging Technologies: **http://www.nanotechproject.org/ (http://www.nanotechproject.org/)**

National Nanotechnology Initiative: **http://www.nano.gov/ (http://www.nano.gov/)**

Appendix A-3

Planning Commission Scoping Minutes, January 12, 2006

PC minutes
11/12/06

2. **1000-3900 Sierra Point Parkway**; GP-2-05, RZ-2-05, DP-6-05, ER-3-05; scoping of Draft Environmental Impact Report of proposed 540,000+/- sq. ft. biotech research and development complex consisting of five buildings, a six-level parking structure, 2,500 sq. ft. retail space, surface parking and open space, involving amending the General Plan to permit research and development uses within the Sierra Point Commercial/Retail/Office Land Use Designation, amending the Sierra Point Commercial Zoning District to permit research and development uses, including standards for animal testing, amending the approved Sierra Point Design Guidelines, and approving the project design; Slough Estates, applicant; Opus West, owner; APN 007-165-080, -090 & -100

Principal Planner Swiecki said the Planning Commission is being asked to scope a proposed draft Environmental Impact Report (EIR) for a 540,000-square-foot research and development (R&D) complex. He noted the proposal calls for five buildings, a six-level parking structure, small retail space, surface parking, and open space on about 22 acres at Sierra Point. He added the site is located east of Shoreline Court and south of Sierra Point Parkway.

Principal Planner Swiecki advised that a number of planning actions will be required for this project to move forward, including amending the General Plan and zoning district regulations to permit R&D within the Sierra Point subarea, including standards for animal testing, amending the design guidelines for Sierra Point, and the design approval of the project. He said all of these decisions will be made in the future.

Principal Planner Swiecki noted the Initial Study, attached to the staff report, identifies a number of topics to be addressed in the EIR. He recommend that the Planning Commission concur that the project results in potentially significant adverse environmental impacts and direct that an EIR be prepared to address the topics identified in the Initial Study. He said the City will select and hire a consultant to produce the EIR, and the applicant will pay the costs of those services.

Commissioner Jameel said he did not necessarily agree with staff's characterization of potential impacts in the Initial Study. He asked if there will be an opportunity in the future to add more factors that could be significant. Commissioner Jameel stated that he had not yet had a chance to fully review the document. Principal Planner Swiecki recommended adding new topics as soon as possible.

Principal Planner Swiecki said the proposed EIR is fairly comprehensive. He noted the only areas not identified for analysis were biology, cultural resources, agricultural resources, and mineral resources.

Commissioner Jameel expressed concern about possible impacts on biological resources. He added that he would review the document and provide his feedback to staff the following day.

Commissioner Hawawini asked if there were any other R&D businesses in that area. Principal Planner Swiecki responded that R&D is currently not a permitted use at Sierra Point; he added that only office buildings are there now. He said the EIR will deal with site-specific impacts from the proposed uses, the site plan, and the building designs.

Commissioner Kerwin noted the City has a great deal invested in Sierra Point. He noted that economic considerations are not part of the EIR, but much of the proposed development came about as a result of economic planning. He said the City originally envisioned retail/commercial development, for example. Commissioner Kerwin recommended revisiting the economic analysis to see what impact the proposed development will likely have on future development in the surrounding area.

Chairman Lentz opened the public hearing and welcomed comments from the applicant.

Jon Bergschneider, Slough Estates International, applicant, introduced Tom Gilman, DES Architects & Engineers, the design architect for the project.

Mr. Bergschneider made a presentation on the proposed life science R&D campus at Sierra Point. He said the site was designed as a campus facility, with space for multiple tenants, extensive landscaping, Bay views, and proximity to the Bay Trail. He described Slough Estates' background in developing mixed-use business parks, and he showed some examples of other life science and R&D campus projects.

Mr. Gilman talked about some of the design concepts envisioned for the Sierra Point R&D campus. He noted the five buildings will be clustered around a major open space at the center of the project. He pointed out the considerable green space around the site and the Bay views beyond. Mr. Gilman showed the location of the parking structure. He said the two buildings closest to the Bay will have three stories, and the remaining three buildings will have four stories.

Mr. Gilman compared the proposed design with the previous proposal. He pointed out the reduced parking area, expanded green areas, and better views. He showed drawings depicting what the building architecture would look like from various vantage points. He noted the design focus was on creating a sense of lightness and visual accessibility. Mr. Gilman pointed out the area for small retail uses near the parking structure.

Mr. Bergschneider thanked the City staff for their assistance throughout this process. He said the applicant looks forward to studying the potential impacts in more detail.

Commissioner Jameel commended the applicant for increasing the landscaped area.

Commissioner Hawawini said he liked the open areas as well. He encouraged the applicant to consider sustainable buildings and attractive rooftops. He encouraged the inclusion of after-work recreational facilities so people would use the site during evening hours.

Chairman Lentz asked about freeway access. Mr. Bergschneider said the plans call for using the existing access from 101.

Chairman Lentz asked whether the two-segment building designs were needed for the proposed uses. Mr. Gilman explained that the buildings have a bent shape, giving the impression of two pieces, to reduce the apparent size and scale and break up the mass of the walls. He noted there are varying heights as well.

Commissioner Hawawini emphasized the need for better public transportation and access. He asked if Slough Estates had a particular tenant in mind. Mr. Bergschneider responded that no tenant has been identified yet.

Karen Evans Cunningham said there has been talk about a possible residential development at Sierra Point in the future. Chairman Lentz stated that residential uses are currently not allowed. Ms. Cunningham noted that if the City is contemplating such uses, they should be based upon a long-term vision for the area agreed to by the citizens of Brisbane.

Ms. Cunningham observed that the focus of the recent placemaking workshop was defining what Brisbane wants, and one of the ideas that emerged was a mixed-used commercial/residential development overlooking the Marina. She said the proposed parking garage conflicts with that approach.

Ms. Cunningham expressed opposition to animal testing, with only a few exceptions. She stated that the application proposes animal testing with no restrictions. She did not believe that this would be in the best interests of Brisbane.

Calvin Webster noted the previous speaker's objections appear to be mostly philosophical in nature. He spoke in support of animal testing that saves human lives and helps develop cures for diseases.

Mr. Webster said he liked the idea of concentrating parking in a garage and encouraging people to walk through the campus. He applauded the architects for the attractive design. He expressed his opinion that the proposed project will enhance the entire area and will be a welcome addition to Brisbane.

Mr. Webster encouraged the applicant to think about shuttle service or getting a SamTrans stop.

Dana Dillworth said she agreed with Commissioner Jamcel's concerns about possible significant impact on biological resources. She said she also agreed with Commissioner Hawawini's points about green building. She recommended that the applicant consider innovative ways of saving energy and reducing energy usage.

Ms. Dillworth stated that her written letter asks that the materials provided in the City Council meeting packet for Ordinance 501, regarding laboratory animal testing, be included in the record for this project. She said she received very little information from staff in response to her request for the Initial Study and background documents. She expressed her opinion it was premature to be submitting a notice of preparation of an EIR because the General Plan amendment had yet to be drafted. Ms. Dillworth pointed out that the potential impacts could be different depending on the level of restrictions imposed and the types of R&D allowed. She added that she agreed with the need to update the thirty-year-old EIR for Sierra Point.

Ms. Dillworth said the Federal EPA recently released a white paper finding there are inadequate controls to regulate use of nanotechnology. She provided a copy of that report and a letter from a Burlingame resident, Michelle Tsai, opposing animal testing and weapons research in the area.

Daniel Ames commented that he liked the overall feel and look of the project, but had questions about potentially dangerous uses. He recommended installing solar panels on the buildings. He asked about projected energy consumption, sewage volume, and disposal of toxic wastes. He suggested that the developer provide plug-in charging outlets for electric cars in the new parking structure.

There being no other members of the public who wished to address the Commission on this matter, Commissioner Kerwin moved to close the public hearing. The motion was seconded by Commissioner Hawawini, approved 4-0 (Commissioner Hunter absent during voting), and the public hearing was closed.

Chairman Lentz noted the Open Space and Ecology Committee has been working on a proposed "green building" ordinance that includes some of the features mentioned. He said the ordinance will utilize the LEED Silver standard. He asked when the green building ordinance is likely to come to the Planning

Commission. Director Prince stated that the City Attorney is reviewing the draft now. He estimated the ordinance will come to the Planning Commission within the next few months.

Commissioner Hawawini clarified that the only residential development at Sierra Point he had heard of was a possible hotel with condominiums on the top floor. He expressed his opinion that housing was not a desirable use for Sierra Point.

Commissioner Hawawini observed that the EIR will address most of the issues of concern raised by the speakers, and he supported moving forward with the process. He urged the applicant to look at sustainability elements, green roofs, facilities to encourage after-work activity, and public transportation.

Commissioners welcomed Commissioner Hunter to the meeting.

Commissioner Jameel recommended changing checklist designations of two items to indicate potentially significant impacts: Item g) on Page H.2.10 and Item a) on Page H.2.18. He encouraged the applicant to thoroughly consider each item on the checklist, even the ones that were not marked.

Commissioner Kerwin noted this project will require a General Plan amendment to go forward, but that amendment will apply only to this particular property at Sierra Point.

Director Prince explained that while the General Plan is comprehensively updated periodically, minor amendments can be adopted by the City four times a year. He said this application entails a fairly simple change that will be handled through that process.

Commissioner Hawawini moved to concur with the proposed scope of the EIR, subject to the modifications identified. The motion was seconded by Commissioner Kerwin and approved, 4 - 0 - 1 (Commissioner Hunter abstaining).

APPENDIX B

DEVELOPMENT AGREEMENT DOCUMENTS

Appendix B-1

Development Agreement Between the City of Brisbane and Sierra Point Associates One and Two

ORDINANCE NO. 299

AN ORDINANCE OF THE CITY OF BRISBANE APPROVING DEVELOPMENT AGREEMENT FOR SIERRA POINT PROPERTY

The City Council of the City of Brisbane does ordain as follows:

Section 1. The Development Agreement dated March 26, 1984, between the City of Brisbane and Sierra Point Associates One and Sierra Point Associates Two, a copy of which is marked Exhibit "A" and which is attached hereto and incorporated herein, is hereby determined to be consistent with the General Plan and any applicable specific plan of the City of Brisbane and is approved subject to the provisions of California Government Code Sections 65864 et seq. and the City's enabling resolution enacted pursuant thereto.

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Section 2. The City Clerk shall record the Development Agreement referred to in Section 1 as provided by California Government Code Section 65868.5.

Section 3. This ordinance shall be posted at three public places in the City of Brisbane and shall go into effect 30 days after 1) its adoption, or 2) 30 days after execution of the Lease-Leaseback referred to on Exhibit "D" of the Development Agreement and sale and delivery of the $14,850,000 bond issuance of the Brisbane Redevelopment Agency, whichever is later.

JEANNINE JONES HODGE
Mayor

ATTEST:

RICHARD B. KERWIN
City Clerk

I, the undersigned, hereby certify that the foregoing ordinance is a full true and correct copy of Ordinance No. 299 of the City of Brisbane, entitled as shown thereon and that it was introduced on the 12th day of March, 1984, and adopted by the Council of the said City of Brisbane on March 26, 1984, by the following roll call vote:

AYES: Smith, Montenegro, Lawrence, Bradshaw, Hodge

NOES: None

ABSENT: None

RICHARD B. KERWIN
City Clerk

J 60206

RECORDING REQUESTED BY:
SAFECO TITLE INS CO.
City of Brisbane

WHEN RECORDED RETURN TO:

City of Brisbane
44 Visitacion Avenue
Brisbane, CA 94005
Attn: Richard B. Kerwin

PAR. X PTN. 10,01 172 017 007

DEVELOPMENT AGREEMENT

Between

CITY OF BRISBANE

and

SIERRA POINT ASSOCIATES ONE

SIERRA POINT ASSOCIATES TWO

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84050693
RECORDED AT REQUEST OF
SAFECO TITLE INSURANCE CO
MAY 11 9 45 AM 1984
MARVIN CHURCH, RECORDER
SAN MATEO COUNTY
OFFICIAL RECORDS

RF 56
LN
MF 17
IW57

2.22.84
K008-836
AG129p

DEVELOPMENT AGREEMENT

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TABLE OF EXHIBITS

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DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT ("Agreement") is entered into as of this 29th day of March, 1984, by and between THE CITY OF BRISBANE (the "City"), a municipal corporation of the State of California, and SIERRA POINT ASSOCIATES ONE, a California general partnership ("SPA One") and SIERRA POINT ASSOCIATES TWO, a California general partnership ("SPA Two"), (SPA One and SPA Two hereinafter shall be referred to collectively as "Developer").

THE PARTIES ENTER INTO THIS AGREEMENT on the basis of the following facts, understandings and intentions:

A. SPA One owns certain real property ("Property 1") located in the City of Brisbane, San Mateo County, California, and SPA Two owns certain real property ("Property 2") in the City of Brisbane and the City of South San Francisco, San Mateo County, California, which together compose Koll Center Sierra Point (the "Project"), an office and commercial project of approximately one hundred two (102) acres, approximately seventy-six (76) acres being in the City of Brisbane and twenty-six (26) acres in the City of South San Francisco. Property 1 and Property 2 are more particularly described in Exhibit A and Exhibit B, respectively. The term "Property" shall hereinafter be used to refer collectively to Property 1 and the portion of Property 2 located within the City of Brisbane.

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B. The City wishes to (i) eliminate uncertainty in the comprehensive development planning of large office and commercial projects, (ii) secure orderly development and progressive fiscal benefits for public services planning, and (iii) ensure attainment of the goal of maximum effective utilization of resources at the least economic cost to the public.

C. The Project is the kind of project the California State Legislature had in mind when it authorized development agreements by its enactment of California Government Code §§ 65864 et. seq. Since the Project is a large scale project, major investments in public facilities are required in the first several years of the development but the ultimate payback to the City and to the Developer will occur gradually over a period of twenty-five (25) years or more.

Developer cannot justify such extensive front-end investment in public facilites without assurance that the Project can be completed as planned and approved, and the City cannot be assured of all the benefits of a large scale, master planned project like the Project without giving that assurance.

In approving the Project, the City has protected the interests of its residents in the quality of their community and environment through the conditions of approval placed upon the City's issuance of Use Permit UP-11-78 ("the Use Permit") for development of the Project and the condi-

tions of approval required to be satisfied prior to approval of Parcel Maps for the Project.

D. The City desires Developer to develop the Project in accordance with this Agreement and the Use Permit because the long-term orderly development of the Project will provide many public benefits to the City, including, but not limited to, the following:

(1) Increased Tax Base. The Project will provide the City with increased tax revenues (including real property taxes, sales taxes, business license taxes, and hotel taxes) from tenants and owners of businesses within the Project. These fiscal benefits will make possible improvements in City services, including particularly police, fire and recreational services.

(2) Public Improvements. Development of the Project will facilitate completion of public improvements ("Public Improvements"). The Public Improvements described in Recital E below will bring benefits to existing and future residents of the City, including improvements in traffic conditions and freeway access, improvements in attractiveness of the community, and improvements in access to San Francisco Bay for recreational purposes.

(3) City Planning. The Project is adjacent to a major freeway, State Highway 101, can be serviced by Caltrans rail commuter service, and is buffered from residential areas of the City.

(4) Local and Regional Balance. San Mateo County has far more workers than jobs, making this area a "bedroom" community. The Project will contribute to making the City and the County a complete community with a balance of shopping, jobs, services, recreational, and residential areas.

(5) Creation of Job Opportunities. The development of the Project will provide a significant number of construction jobs and permanent employment opportunities for the residents of Brisbane and San Mateo County.

(6) Redevelopment Area. The Property contains the majority of the land within the City's Redevelopment Area No. 1 and thus the success of the City's Redevelopment Plan for Redevelopment Area No. 1 is greatly dependent upon successful development of the Project site.

(7) Public Marina. The City and the Redevelopment Agency ("Redevelopment Agency") of the City have caused a public marina the ("Brisbane Marina") to be constructed upon land contiguous to the eastern boundary of the Project and a successful Project will contribute greatly to successful development of the Brisbane Marina and adjacent commercial areas owned by the Redevelopment Agency.

E. The City has levied assessments on the Project site in excess of Sixteen Million and no/100ths Dollars

($16,000,000.00) through Local Improvement District LID-79-1 (the "Assessment District") for the construction of certain improvements ("Public Improvements") serving the City and the Project, including, but not limited to the following:

1. Freeway Ramps. Four (4) freeway ramps, northbound on- and off-ramps and southbound on- and off-ramps have been constructed to serve the Project site and to provide access to the City's Redevelopment Area No. 1, to the Marina, and to a City park adjoining Brisbane Lagoon;

2. Marina Boulevard. Marina Boulevard provides access to the Marina and to the park areas on the shoreline of Sierra Point as well as serving as the primary Project interior street;

3. Lagoon Road. Lagoon Road provides an interconnection between existing city commercial and residential areas and the public facilities adjacent to San Francisco Bay;

4. Sierra Point Parkway. Sierra Point Parkway provides access along the shore of Brisbane Lagoon from State Highway 101 to Sierra Point.

F. Developer has assumed the obligations contained in certain prior agreements among Developer's predecessor-in-interest in the Project and the City and the Redevelopment Agency, including the obligation to construct a specified number of square feet of building space by

specified dates, which prior agreements are listed in EXHIBIT C (the "Prior Agreements").

G. Developer has entered into certain other agreements with the City and the Redevelopment Agency, listed in EXHIBIT D, under which Developer has undertaken substantial long term commitments to the City, including (i) the immediate payment of approximately Two Million and no/100ths Dollars ($2,000,000.00) as prepaid rentals for an initial lease term of eighty (80) years for the lease of certain commercial property leased from the Redevelopment Agency, and (ii) the Developer's agreement to lease certain other real property from the Redevelopment Agency at a rental rate which will permit the Redevelopment Agency to make timely payment of principal and interest on certain Redevelopment Agency bonds described in Recitals H and I below.

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H. The City and the Redevelopment Agency desire to repay an issue of Redevelopment Agency Bond Anticipation Notes and to acquire the leasehold interest of the Brisbane Bayfront Public Facilities Corporation (the "Corporation") in the Brisbane Marina.

I. The City and the Redevelopment Agency desire to accomplish the bond repayment and leasehold acquisition referred to in Recital H by the issuance of Tax Allocation Bonds by the Redevelopment Agency, but the Redevelopment Agency would be unable to market such Tax Allocation bonds without the agreement by Developer to pay in all events the

rentals due under the leases, referred to in Recital G, clause (ii) above, to assure the timely payment of principal and interest instalments on the Tax Allocation Bonds.

J. The agreements and commitments described in Recital G significantly increase Developer's costs and obligations in connection with the Project and would not be undertaken without assurance from the City that the Project can be completed as planned through the adoption of this Agreement.

K. On March 7, 1984, the City Planning Commission held a noticed public hearing on this Agreement and (i) determined that this Agreement is consistent with the City's General Plan and (ii) voted to recommend that the City Council approve this Agreement.

L. On March 12 and 15, 1984, the City Council held a noticed public hearing on this Agreement, found this Agreement consistent with the City's General Plan, and introduced Ordinance No. 299 approving this Agreement.

M. On March 26, 1984 the City Council adopted Ordinance No. 299 approving this Agreement.

NOW, THEREFORE, pursuant to the authority contained in Section 65864, et seq., of the California Government Code and in consideration of the mutual covenants and agreements of the parties set forth herein, the parties hereto agree as follows:

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1. DEVELOPMENT OF THE PROPERTY.

1.1 Use Permit. The City shall have the right to control development of the Property and Developer shall have the right to develop the Property in accordance with the provisions of (i) Use Permit UP-11-78 attached hereto as EXHIBIT E, and (ii) the Architectural Design Guidelines, Sierra Point Office Park, dated April 1982 and approved by the City on June 2, 1982 (the "Design Guidelines") attached hereto as EXHIBIT F.

1.2 General Plan. The City shall have the right to control development of the Property and Developer shall have the right to develop the Property in accordance with the general plan ("General Plan") land use designation for the Property (Retail/Commercial/Offices) as set forth in the General Plan on the date of adoption of Ordinance No. 299.

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1.3 Design Review. City and Developer agree that City does not give up its right, by entering into this Agreement, to subsequently exercise discretionary design review approval of site plans as provided in the City's Zoning Ordinance and the Use Permit. However, the City shall not exercise such discretion in a manner which will materially interfere with the development of the Property consistent with the Use Permit and Design Guidelines. Such discretion shall not arbitrarily increase the cost of such development or substantially lessen the economic value of the uses provided for therein.

2. EFFECT OF AGREEMENT.

2.1 City Codes. The Property shall be subject to the ordinances, resolutions, rules, regulations, and official policies (e.g., Municipal Code, General Plan, zoning ordinances, subdivision ordinances, building code (collectively "City Codes")" of the City governing uses, density, height, design, public improvements and construction standards which are in effect at the date of adoption of Ordinance No. 299 and any (i) changes to the City Codes or (ii) new City Codes; provided, however, any inconsistent provision of the City Codes or changes to the City Codes or new City Codes shall not apply if they materially interfere with development of the Property consistent with the Use Permit and the Design Guidelines as stated in Section 1.3 or with the rate of development selected by the Developer.

2.2 Prior Agreements. This Agreement shall not be construed to modify or supersede any of the Prior Agreements, and the Prior Agreements shall not be construed to be part of this Agreement. Both parties hereby reaffirm all of the Prior Agreements.

2.3 Supersedure By Subsequent State or Federal Laws or Regulations. In the event that state or federal laws or regulations, enacted after this Agreement has been entered into, prevent or preclude compliance with one or more provisions of this Agreement, such provisions of the Agreement shall be modified or suspended as may be necessary to comply with such state or federal laws or regulations.

Notwithstanding the foregoing, in the event a challenge to such law or regulation is successful and such law or regulation is declared or held to be void, invalid, or unenforceable, this Agreement shall remain unmodified and in full force and effect.

3. TERM.

The term of this Agreement shall commence on the effective date of Ordinance No. 299 adopting this Agreement and shall terminate December 31, 2005, unless sooner terminated or extended as hereinafter provided.

4. USES.

The permitted uses of the Property, the density or intensity of use, the maximum height and size of buildings and provisions for reservation or dedication of land for public purposes shall be as provided in the Use Permit and the Design Guidelines.

5. STANDARD OF REVIEW OF PERMITS

All permits ("Permits") required by Developer to develop the Property, including, but not limited to, (i) subdivision or parcel map approvals; (ii) grading permits; (iii) building permits; and (iv) certificates of occupancy, shall be expeditiously issued by City upon application by Developer, so long as the following conditions are met:

(a) Compliance With This Agreement and Use Permit. Developer is in compliance with the terms and conditions set forth in this Agreement and the Use Permit; and

(b) Compliance With City Codes. Developer has complied with the applicable City Codes as defined in this Agreement.

6. DISPUTES, ANNUAL REVIEW, DEFAULT.

6.1 Annual Review. City and Developer shall annually review this Agreement and all actions taken pursuant to the terms of this Agreement.

6.2 Developer's Submission. Not less than thirty (30) days nor more than sixty (60) days prior to April 1 of each year, Developer shall submit a letter with supporting evidence to the City Council demonstrating Developer's good faith compliance with the terms and conditions of this Agreement and shall include in such letter a statement that such letter is being submitted to the City pursuant to the requirements of Government Code Section 65865.1.

6.3 City's Findings. Within thirty (30) days after the receipt of Developer's submission, the City Council shall determine whether Developer has, for the year under review, demonstrated good faith compliance with the terms and conditions of this Agreement. If the City Council finds that Developer has not complied in good faith with the terms and conditions of this Agreement for the year under

review, the City Council may issue a written notice of noncompliance ("Notice of Noncompliance") specifying in detail the grounds therefor and all facts demonstrating such noncompliance such that Developer may address the issues raised in the Notice of Noncompliance on a point-by-point basis. Developer shall have thirty (30) days to respond in writing to the Notice of Noncompliance. If, after receipt of the Developer's response or the passage of the thirty (30) day response period, the City Council, at a public hearing, finds on the basis of substantial evidence, that the Developer and/or any successor in interest thereto has not complied in good faith with terms or conditions of the Agreement, the City Council may terminate or modify the Agreement.

6.4 Remedies.

6.4.1 Specific Performance. Unless amended or terminated in accordance with the terms of the Agreement, this Agreement is specifically enforceable by either party. Notwithstanding anything to the contrary herein, the parties hereto recognize and acknowledge that there is a risk that circumstances may occur under which one of the parties may not be able to specifically perform its obligations pursuant to the terms of this Agreement for reasons beyond that party's control. The City agrees and acknowledges that if Developer cannot reasonably be required to specifically perform,

then the City's remedies will be limited to damages, amendment or termination of this Agreement.

6.4.2 Damages. Both parties recognize and agree that damages are a less appropriate remedy for the party being deprived of the full benefits of this Agreement than specific performance. Both parties further agree, however, that in the event a court determines that an action or course of conduct by City or Developer shall constitute a willful and intentional attempt to violate this Agreement, then compensatory damages would be appropriate. Both parties waive any claim for punitive damages and any claim of personal liability against the officials of the other party.

7. AMENDMENT OR TERMINATION.

7.1 Agreement. If City and Developer mutually agree to terminate or amend the terms of this Agreement, the amendment or termination shall be accomplished in the manner provided in state law for the adoption of development agreements, except as provided in Subsection 7.2.

7.2 Other Documents. City and Developer may by mutual agreement amend or modify the Use Permit or the Design Guidelines, without seeking an amendment of this Agreement, upon application by Developer for such amendment or modification pursuant to City Code provisions for amendments to zoning ordinances. This Agreement shall incorpor-

ate all the terms and conditions of the Use Permit and the Design Guidelines as so amended or modified.

8. ASSIGNABILITY.

The right to develop the Property or any parcel thereof pursuant to this Agreement and the obligation to comply with conditions of the Use Permit and the Design Guidelines shall run with the Property except as provided herein:

(a) The obligations under the Use Permit affecting or benefiting more than one site within the Property shall be personal to Developer and shall also run with any portion of the Property which is still owned by Developer at the time City enforces the obligation. However, to the extent that such obligations arise from assessment liens or benefit districts, the obligations shall run with the lands assessed or benefitted whether or not still owned by Developer.

(b) Developer may assign its obligations pursuant to subsection (a) only upon approval by the City.

9. GENERAL.

9.1 Construction of Agreement. The language in all parts of this Agreement shall, in all cases, be construed as a whole and in accordance with its fair meaning. The captions of the paragraphs and subparagraphs of this Agreement are for convenience only and shall not be con-

sidered or referred to in resolving questions of construction.

9.2 Severability. If any material provision of this Agreement or the Use Permit or the Design Guidelines shall be adjudged to be invalid, void or illegal, each party shall have the right to unilaterally terminate this Agreement, or to mutually seek amendment of this Agreement pursuant to Section 7.

9.3 Attorneys' Fees. In the event of any dispute between the parties involving the covenants or conditions contained in this Agreement, the prevailing party shall be entitled to recover reasonable expenses, attorneys' fees and costs.

9.4 No Waiver. No delay or omission by the City in exercising any right or power accruing upon the noncompliance or failure to perform by Developer under the provisions of this Agreement shall impair any such right or power or be construed to be a waiver thereof. A waiver by City of any of the covenants or conditions to be performed by Developer shall not be construed as a waiver of any succeeding breach of the same or other covenants and conditions hereof.

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9.5 Exhibits. The following exhibits attached hereto are incorporated herein by this reference.

Exhibit A.	Property One
Exhibit B.	Property Two
Exhibit C.	Prior Agreements
Exhibit D.	Contemporaneous Agreements
Exhibit E.	Use Permit Up-11-78
Exhibit F.	Architectural Design Guidelines

10. NOTICES.

10.1 To Developer. Any notice required or permitted to be given by City to Developer under or pursuant to this Agreement shall be deemed sufficiently given if in writing and delivered personally to an officer of Developer, or mailed, with postage thereon fully prepaid, registered or certified mail, return receipt requested, addressed to Developer as follows:

Sierra Point Associates One
Koll Center Sierra Point, Suite 102
1000 Marina Boulevard
Brisbane, CA 94005

With a copy to:
Howell & Hallgrimson
1000 Commercial Building
28 North First Street
San Jose, CA 95113
Attn: Steven L. Hallgrimson

10.2 To City. Any notice required or permitted to be given to City under or pursuant to this Agreement shall be made and given in writing, if by mail, with postage

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thereon fully prepaid, registered or certified mail, return receipt requested, addressed to:

City of Brisbane
44 Vistacion Avenue
Brisbane, California 94005
Attn: City Council
City Attorney
City Manager

and, if personally delivered, to the City Clerk, at the City Hall, together with copies marked for the City Council, City Manager and City Attorney.

10.3 Effect of Notice. The provisions of this Section shall be deemed directive only and shall not detract from the validity of any notice given in a manner which would be legally effective in the absence of this Section.

IN WITNESS WHEREOF, City and Developer have executed this Agreement in one (1) or more copies as of the day and year first above written.

84050693

CITY

City of Brisbane

By _____
Mayor

Attest:

_____
City Clerk

Approved as to form:

_____
City Attorney

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DEVELOPER

Sierra Point Associates One,
a California general
partnership

By Koll Sierra Point Partners
One, a California general
partnership

By The Koll Company, a
California corporation

By _____

By _____

By New England Mutual Life
Insurance Company, a
Massachusetts corporation

By Copley Real Estate Advisors,
Inc., a Massachusetts
corporation, asset manager
and advisor hereunto duly
authorized

By _____

Sierra Point Associates Two, a
California general partnership

By Koll Sierra Point Partners
Two, a California general
partnership

By The Koll Company, a
California corporation

By _____

By _____

By New England Mutual Life
Insurance Company, a
Massachusetts corporation

By Copley Real Estate Advisors,
Inc., a Massachusetts
corporation, asset manager
and advisor hereunto duly
authorized

By _____

84050693

ACKNOWLEDGMENTS

STATE OF CALIFORNIA)
) ss.
COUNTY OF Santa Clara)

On this the 28th day of March, 1984, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Steven G. Spend, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the Vice President, and David L. Pogue, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the Vice President, on behalf of THE KOLL COMPANY, the corporation that executed the within instrument on behalf of KOLL SIERRA POINT PARTNERS ONE, the partnership that executed the within instrument on behalf of SIERRA POINT ASSOCIATES ONE, the general partnership that executed the within instrument, and acknowledged to me that KOLL SIERRA POINT PARTNERS ONE executed the same as a general partner of SIERRA POINT ASSOCIATES ONE and that SIERRA POINT ASSOCIATES ONE executed the same.

WITNESS my hand and official seal.

84050693

(SEAL)

Linda Wrigglesworth
Signature

OFFICIAL SEAL
LINDA WRIGGLESWORTH
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
My Comm. Expires Feb. 20, 1987

ACKNOWLEDGMENTS

COMMONWEALTH OF MASSACHUSETTS)
) ss.
COUNTY OF Suffolk)

On this the 27th day of March, 1984, before me, the undersigned, a Notary Public in and for said County and State, personally appeared KEVIN M. MAHONY, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the SENIOR VICE PRESIDENT of COPLEY REAL ESTATE ADVISORS, INC., the corporation that executed the within instrument on behalf of NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY, the corporation that executed the within instrument on behalf of SIERRA POINT ASSOCIATES ONE, the general partnership that executed the within instrument, and acknowledged to me that such corporation executed the same as a general partner of SIERRA POINT ASSOCIATES ONE and that such GENERAL PARTNERSHIP executed the same.

WITNESS my hand and official seal.

84050693

Gail M. Litchfield
Signature
GAIL M. LITCHFIELD
Notary Public
Commonwealth of Massachusetts
My Commission Expires December 19, 1986

(SEAL)

ACKNOWLEDGMENTS

STATE OF CALIFORNIA)
) ss.
COUNTY OF Santa Clara)

On this the 28th day of March, 1984, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Steven G. Spend, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the Vice President, and David L. Pogue, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the Vice President, on behalf of THE KOLL COMPANY, the corporation that executed the within instrument on behalf of KOLL SIERRA POINT PARTNERS TWO, the partnership that executed the within instrument on behalf of SIERRA POINT ASSOCIATES TWO, the general partnership that executed the within instrument, and acknowledged to me that KOLL SIERRA POINT PARTNERS TWO executed the same as a general partner of SIERRA POINT ASSOCIATES TWO and that SIERRA POINT ASSOCIATES TWO executed the same.

WITNESS my hand and official seal.

OFFICIAL SEAL
LINDA WRIGGLESWORTH
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
My Comm. Expires Feb. 20, 1987

(SEAL)

Linda Wrigglesworth
Signature

84050693

ACKNOWLEDGMENTS

COMMONWEALTH OF MASSACHUSETTS)
) ss.
COUNTY OF Suffolk)

On this the 27th day of March, 1984, before me, the undersigned, a Notary Public in and for said County and State, personally appeared KEVIN M. MAHONY, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the SENIOR VICE PRESIDENT of COPLEY REAL ESTATE ADVISORS, INC., the corporation that executed the within instrument on behalf of NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY, the corporation that executed the within instrument on behalf of SIERRA POINT ASSOCIATES TWO, the general partnership that executed the within instrument, and acknowledged to me that such corporation executed the same as a general partner of SIERRA POINT ASSOCIATES TWO and that such GENERAL PARTNERSHIP executed the same.

WITNESS my hand and official seal.

84050693

Gail M. Litchfield
Signature

GAIL M. LITCHFIELD
Notary Public
Commonwealth of Massachusetts
My Commission Expires December 19, 1986

(SEAL)

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN MATEO)

On this 28th day of March, 1984, before me, the undersigned, a Notary Public in and for said State, personally appeared Jeannine Jones Hodge, known to me to be the Mayor, and Richard B. Kerwin, known to me to be the City Clerk, of the CITY OF BRISBANE, a municipal corporation, organized and existing under the laws of the State of California, the corporation that executed the within instrument, known to me to be the persons who executed the within instrument on behalf of said corporation, and acknowledged to me that said corporation executed the within instrument pursuant to a resolution of its City Council.

WITNESS my hand and official seal.

84050693

OFFICIAL SEAL
LINDA WRIGGLESWORTH
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
My Comm. Expires Feb. 20, 1987

Linda Wrigglesworth
Signature

(SEAL)

EXHIBIT A

LANDS OF SIERRA POINT ASSOCIATES 1 (SPA 1)

All that certain real property situate in the City of Brisbane, County of San Mateo, State of California and being Lot 2 as shown on that certain map entitled "Sierra Point Unit No. 1" filed in the office of the County Recorder, San Mateo County, in Volume 106 of Maps at page 9. Excepting therefrom all that portion described in the deed to the City of Brisbane, recorded July 15, 1982 under Serial #82059418 official records of said County.

84050693

EXHIBIT B

LANDS OF SIERRA POINT ASSOCIATES 2 (SPA 2)

All that certain real property situate in the City of Brisbane, County of San Mateo, State of California and being the following lots as shown on those subdivision maps filed in the office of the San Mateo County Recorder:

Lot 1 Sierra Point Unit No. 1 filed in Volume 106 of Maps at page 9; Lots 1 and 2 Sierra Point Unit No. 2 filed in Volume 107 of Maps at page 31; Lots 1, 4, 5 and the underwater parcel labelled remaining lands of Sierra Point Development, Sierra Point Unit No. 3 filed in Volume 110 of Maps at page 54, Lots 1, 3, 4, 6, 8, 9 of that Parcel Map filed in Volume 54 of Parcel Maps at pages 57 AND 58 ON MAY 10, 1984

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PRIOR AGREEMENTS

1. Brisbane Marina Development Agreement dated September 10, 1979 by and among the City of Brisbane, the Brisbane Redevelopment Agency and Byron H. Lasky and John Sullivan and Sierra Point Development Company.

2. Development Schedule and Marina Facility Financing Agreement dated April 24, 1981 by and among the City of Brisbane, the Brisbane Redevelopment Agency, the Brisbane Bayfront Public Facilities Corporation and Sierra Point Development Company.

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EXHIBIT C

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CONTEMPORANEOUS AGREEMENTS

1. Inducement Agreement dated as of November 14, 1983 by and among the City of Brisbane, the Brisbane Redevelopment Agency, the Brisbane Bayfront Public Facilities corporation, and The Koll Company.

2. Lease and Leaseback dated MARCH 29, 1984 by and among the Brisbane Bayfront Public Facilities Corporation, the Brisbane Redevelopment Agency, the City of Brisbane, and Sierra Point Associates Two.

3. Ground Lease Agreement dated MARCH 29 1984 by and among the City of Brisbane, Brisbane Redevelopment Agency, and Sierra Point Associates Two.

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EXHIBIT D

CITY OF BRISBANE

CITY HALL
44 Visitacion Avenue
Brisbane, California 94005
Phone: 467-1515

October 6, 1978

RECEI
NOV 20

Mr. Byron Lasky
Sierra Point Development Company
16255 Ventura Boulevard, Suite 803
Encino, CA 91436

84050693

Re: Use Permit UP-11-78; A.P. Nos. 007-172-050, 060, and portion of 007-172-100

Dear Mr. Lasky:

At its meeting of September 20, 1978, the Brisbane Planning Commissic considered your request to allow a phased development for commercial, office, and recreational uses on the filled portion of Sierra Point, O-A Zoned District.

The Planning Commission determined that the proposed use would not be detrimental to the health, safety, morals, comfort, and general welfare of the persons residing or working in the neighborhood of such proposed use, and that it would not be injurious or detrimental to property and improvements in the neighborhood or to the general welfare of the City. Accordingly, the Planning Commission voted to grant the Use Permit, subject to the following conditions:

1. A parcel map dividing the subject property into appropriately designed parcels be prepared, approved by the City, and recorded;

2. A development Plan be approved by the Planning Commission. Said plan shall include at least the following:

   a. A site plan at suitable scale showing the entire property and the location of all proposed uses, the approximate location of building, parking and landscaping areas, streets, public areas, and other related information suggested by the Planning Director;

   b. A program of development which describes the relationship and respective responsibilities of the applicant, City Redevelopment Agency, and any other public or private agency, and describes the schedule of activities and source of any publicly financed improvements;

c. Detailed site plans, improvement plans and building elevations for any development for which a city permit is required;

d. Adequate soils, geologic, traffic and other appropriate engineering studies to ensure the suitability and safety of the proposed development;

e. Other related information which is reasonably related to the proposed development and is requested by the Planning Commission or Planning Director in order to ensure that the Use Permit will remain consistent with the findings made by the Planning Commission in granting the Use Permit;

3. That the applicant enter into an agreement with the City to reimburse the City for administrative costs attributed to review of the parcel map and development plan, and related material;

4. The easterly 20± acres on Sierra Point which are adjacent to the San Francisco Bay be dedicated to the City of Brisbane for marina purposes on or prior to December 1, 1978; and

5. The Use Permit conditions shall be fulfilled prior to the issuance of any building permit.

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As the appeal period has ended, please execute the duplicate of this letter and return it in the enclosed, self-addressed, stamped envelope The Use Permit will not be in effect until acknowledgment is received by the Planning Department.

Very truly yours,

Robert L. Ironside
Planning Director

jm
Enclosure

Acknowledged:

Date: 11/21/78

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EXHIBIT E

SIERRA POINT

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DRAFT

Architectural Design Guidelines

Sierra Point Office Park

Brisbane, California

Sierra Point Development Company

Royston Hanamoto Alley & Abey
Landscape Architects/Planners

Burns & Nettle, AIA
Architects

April 1982

EXHIBIT F

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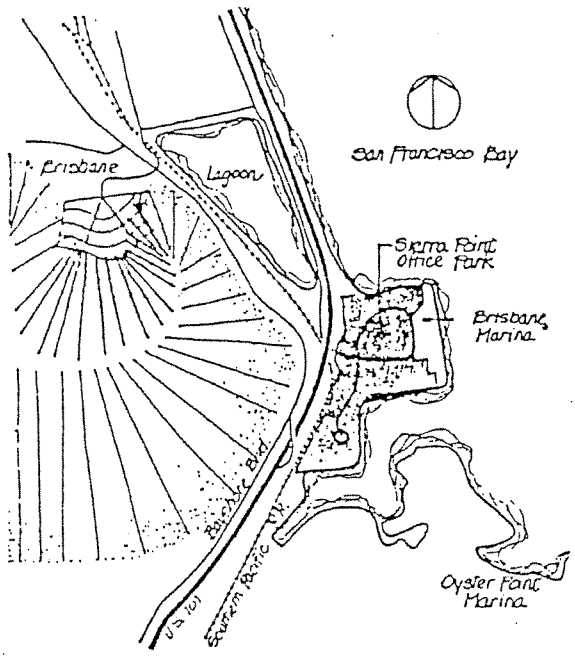
Introduction



Location

Sierra Point Office Park is located on the Sierra Point Peninsula in the cities of Brisbane and South San Francisco. The peninsula is a diked landfill of 130 acres, three miles south of the San Francisco City/County boundary. The Office Park shares the peninsula with the Brisbane Marina which forms the project's eastern limits. On the west the project is bounded by U. S. 101. On the north and south, the project is bounded by San Francisco Bay. U. S. 101 provides the link to San Francisco and the Greater San Francisco Bay Area. Proposed freeway connections to and from Sierra Point provide improved access to this important link to the Bay Area market.

General Description

The Sierra Point Peninsula is a flat parcel of land presently at elevation ±15 above sea level. Settlement over the next 100 years will decrease the elevation to ±12. The perimeter of the peninsula is the dike and rip-rap, with approximately 3:1 slopes on the Bay edge, flatter at the corners within the Brisbane Marina development. A drainage channel lies northwest of the site with a flood gate controlling water movement. Highest Expected Water Level is the 5.85 elevation line from which Bay Conservation Development Commission (BCDC) jurisdiction extends for 100 feet.

Climate

Climatic conditions at Sierra Point are characteristic of conditions prevailing around the Bay Area. Summers are mild with coastal fog; winters are cool with rain; falls often offer the warmest days of the year. Winds on the site are fairly constant, occurring approximately

85% of the time and from the northwest. Wind velocities tend to increase in the afternoon hours, especially during summer when thermal activity increases in the inland valleys. However, since Sierra Point is sheltered slightly by the San Bruno Mountains and not directly within the path of winds passing through Visitacion Valley, the site does not experience the velocities associated with other wind passages around the Bay.

Soils

The site is a former solid waste disposal site. The surface is presently composed of soil material and rubble varying in depth from a maximum of 10 feet to a minimum of 1 foot. Settlement is predicted from consolidation of the underlying bay mud and compression of the garbage fill.

Objectives

Objectives

The objective of these Guidelines is to create a pleasant and functional working environment for Sierra Point Office Park. A high quality environment at Sierra Point will be an asset to the Cities of Brisbane and South San Francisco. Sierra Point will provide a special attraction that will make the Office Park competitive with other developments in the area. The Guidelines represent only a portion of the process whereby such an objective is achieved, but it is the foundation on which later design decisions should be based. In addition, the success of the product requires a commitment by those involved in implementing the stan ards as outlined in these Guidelines.

The Guidelines provide design standards on a conceptual level which are to be implemented in the final design. These design standards are the means in achiev ing the following objectives:

1. Creation of an identity for Sierra Point Office Park.

2. Resolution of problems associated with siting on a waste disposal site which include problems of differential settlements.

3. Creation of functional and efficient circulation systems for pedestrians, autos, and bicycles.

4. Provide guidance for building design compatible with the site and the objectives of the owner and the city of Brisbane.

Conceptual Master Plan

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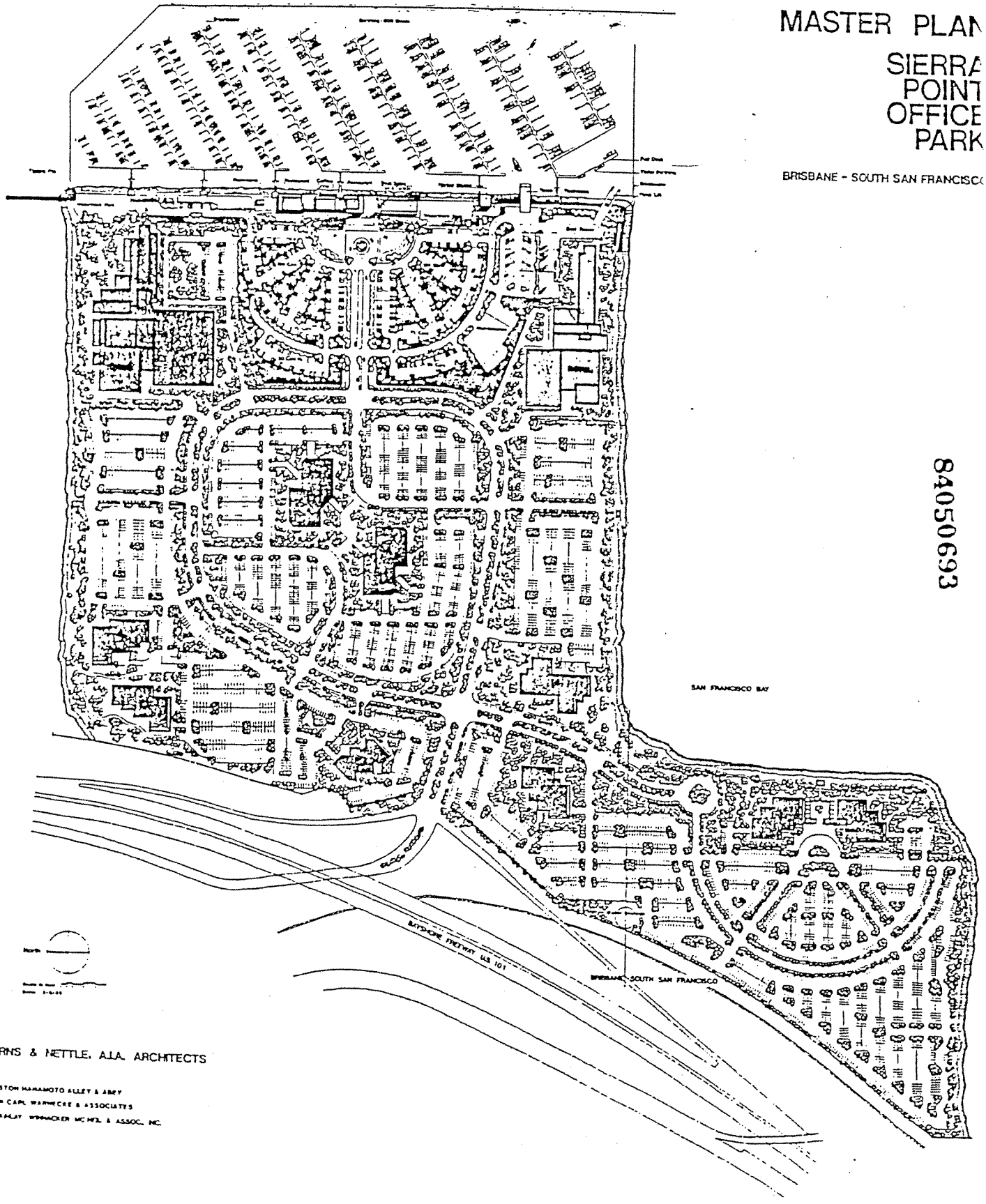
MASTER PLAN

SIERRA POINT OFFICE PARK

BRISBANE - SOUTH SAN FRANCISCO



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BURNS & NETTLE, A.I.A. ARCHITECTS

POYSTON HARAMOTO ALLEY & ARMY

JOHN CARL WARNECKE & ASSOCIATES

MACKAY WINNACKER MCHTL & ASSOC, INC.

Open Space

A system of open spaces will be established at Sierra Point Office Park to unite the various parts of the development, to screen parking areas, to mitigate noise and wind, and to meet the recreation needs of both Office Park tenants and the general public. This system, defined as the landscape matrix forms the infrastructure of landscape development within the Office Park. The landscape matrix influences and greatly contributes to the roadway rights-of-way, public access corridors and utility locations.

Several major view corridors will be aligned with the bayward lane of the primary street system to provide a visual access corridor extending from the inland area to the shoreline access Wide corridors will be encouraged, without the interference of structural masses, to enhance the overall visual access to the bay.

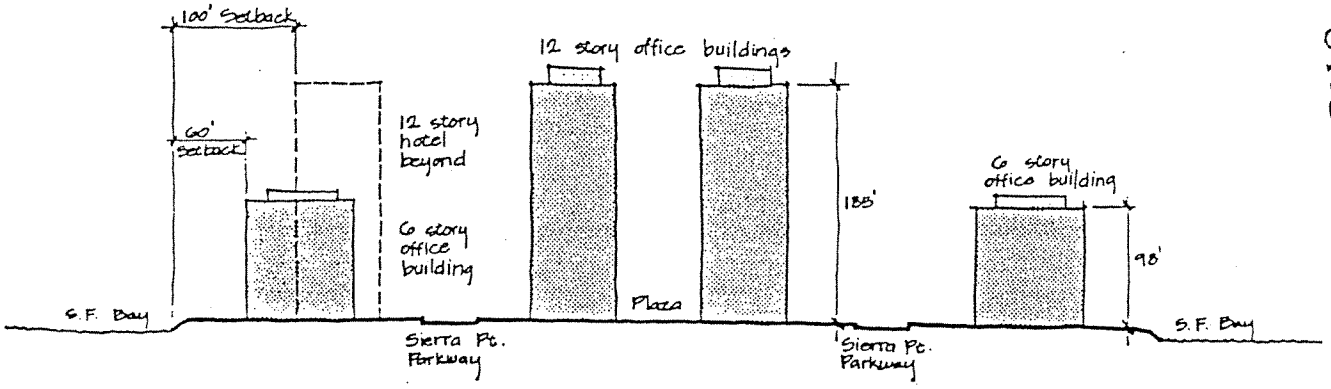
Buildings will be clustered to provide outdoor courtyard areas. In addition, linear connectors will be used to tie these interior spaces to those on the periphery. These linear connectors can also serve as utility corridors for the Office Park.

Large formal spaces are created at walkway intersections and building clusters which are highlighted with plazas treate with special pavements. Mounding, low walls and seating also delineate and enclose these mini-plazas whose forms will be designed to accommodate a variet of activities: sitting, lunching, conversation, people watching, etc.

Building Locations

The Brisbane portion of the conceptual master plan incorporates seven mid-rise office buildings and two luxury hotels.

In developing the current Master Plan, the buildings have been carefully sited to produce a compatible mix of building heights that will produce a properly scaled, attractive profile within the project limits and from adjacent land and bay perspectives. In positioning the structures, views are to be maximized from the buildings and through the wide corridors to the bay's edge. The Office buildings and hotels will vary from six to twelve stories in height (exclusive of mechanical penthouses), with the tallest buildings being grouped in the center portion of the site. Office buildings along the shoreline will be reduced in height to six stories to enhance views from the more interior buildings and to preserve the adjoining bay vistas.



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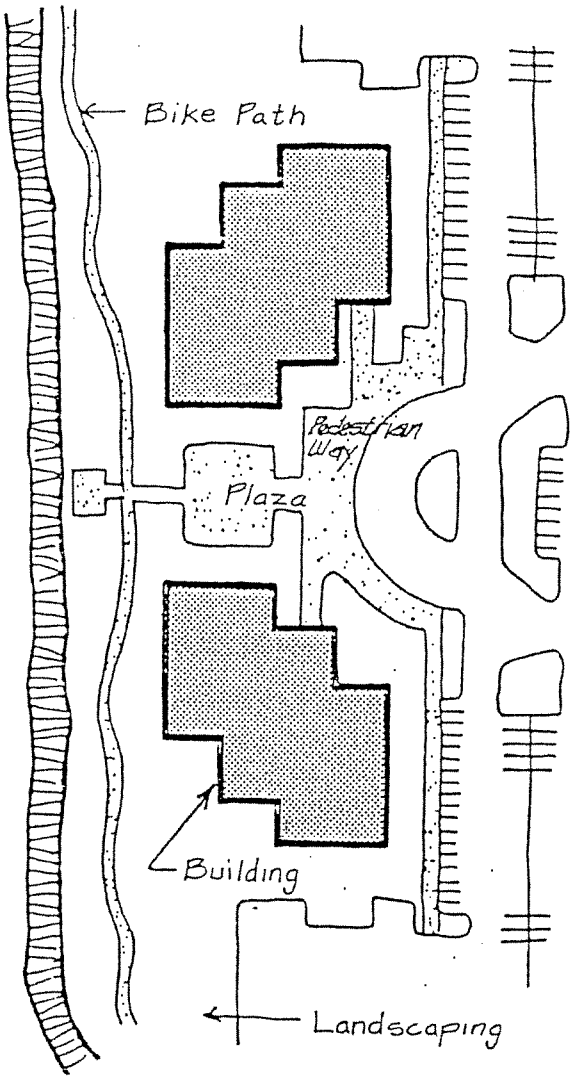
The mid-rise concept offers the great advantage of leaving a large portion of the site in landscaped open space while seemingly reducing the project's density.

The seven-hundred room convention hotel will be located on the northeast shore and will feature a twelve story guestroom tower and full convention facilities for three thousand visitors. The southeast corner of the site is the proposed location of the four hundred room luxury hotel featuring "executive" size rooms in a ten story tower. The two hotels have been sited to take full

advantage of the marina and bay views from the guest rooms. The two towers are widely separated from each other to preserve marina views to the east from the other buildings on site. The hotel building bulk and mass will be limited by utilizing slender quest room towers.



Circulation

A hierarchy of vehicular roadways and pedestrian pathways has been establishe to provide circulation routes throughou the project. Sierra Point Parkway, the major roadway will carry the main vehicular load. Within the right-of-way or the bayward side of the parkway are pedestrian and bicycle paths which continue for the full length of this road.

Within the individual parcels, the vehicular roadway and pedestrian pathways will be developed to minimize conflict between pedestrians and automobiles. The clustering of buildings, besides creating outdoor courtyards and plazas, greatly reduces the pedestrian/vehicular conflict mentioned above. The connection of these outdoor spaces to adjacent spaces as well as to the peripheral pedestrian and bicycl circulation requires points of intersection between the vehicular and pedestrian systems. At these intersections the pedestrian pathway will be emphasized by use of interlocking concrete pavers.

Parking

Parcelization within the Office Park requires that each development provide parking for its facilities. The layout of internal organization of surface parking lots in the Office Park is designed to maximize the ease of parking and reaching a destination on foot. This will be accomplished by

organizing vehicle circulation and directional signing to minimize the number of driver decisions. Pedestrian flow from a lot to a building is maximized by orientation of parking bays perpendicular to buildings. The Master Plan incorporates two approaches to parking: conventional on-grade parking lots and subterranean lots under buildings.

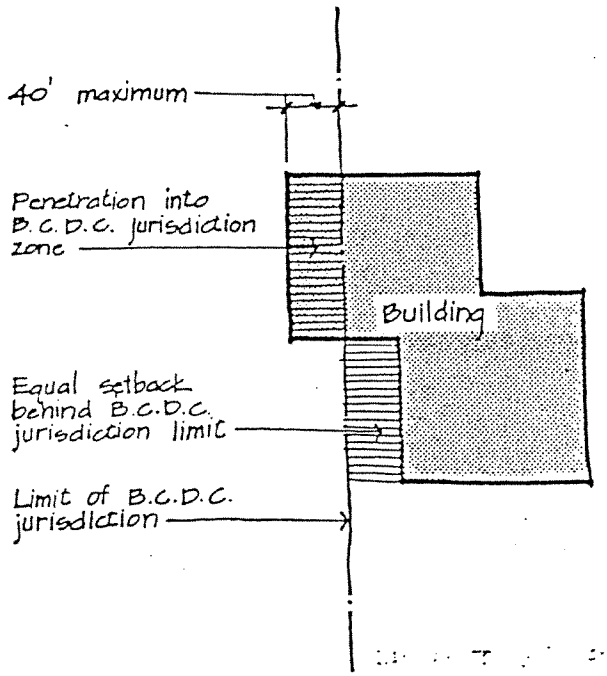
Landscape treatment of parking areas will be twofold. First, the lots will be screened from the roadways by mounds and trees. Secondly, planting islands at each end of a parking bay and the random introduction of planting islands throughout parking areas are utilized to relieve the expanse of asphalt both visually and physically.

Water's Edge

The Bay edge is an important aspect of the Sierra Point Office Park development. The Bayfront provides a great attraction to those working in and visiting the Office Park. This attraction is reinforced by a continuous landscape matrix which allows movement to and from the Bay Edge.

The spatial quality of the Bayfront is related to the proximity of the buildings fronting the Bay. These buildings determine the limit of the Office Park. Modulation of this building edge by careful placement and varying setbacks from the Bay, establishes a sense of interplay between the Bay and Office Park. In addition, the varying building setbacks, along with planting, create a variety of spatial sequences along the Bayfront providing more interesting views to visitors and passers-by than would be provided by a straight building edge.

This interplay between Bay and Office Park could be further developed by placing buildings within the 100 foot band of BCDC jurisdiction. The monotony of building edges held to an arbitrary line would thereby be broken allowing the Office Park to modulate into and out of the one hundred foot zone. This modulation, in an organized fashion, would establish a variety of spatial sequences and would generate greater interest at the water's edge.



Architecture

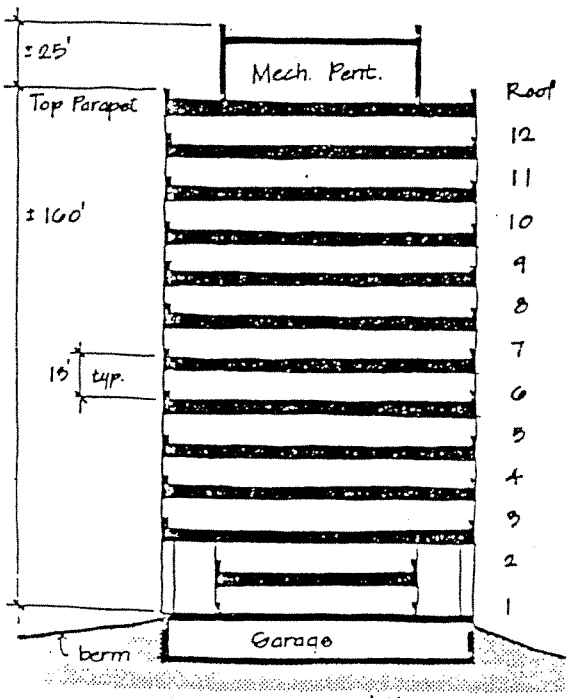
General

The purpose of these architectural guidelines is to create a basis for an integrated and cohesive development These general guidelines are meant to ensure design continuity but not to restrict creativity. Departure from the guidelines should be made only after careful evaluation.

The Sierra Point Office Park must be a development for both the public and private users; it must create the ambience of both an office park and a public/recreational area, and should be developed with careful planning.

Overall Design Concerns

The Sierra Point Office Park is planne as a harmonious, comfortable and inviting work environment. The landscaping, graphics and lighting will be unifying elements for the site and the appearance of the buildings and their architecture will make an overall contribution to the public's perception of the Office Park.

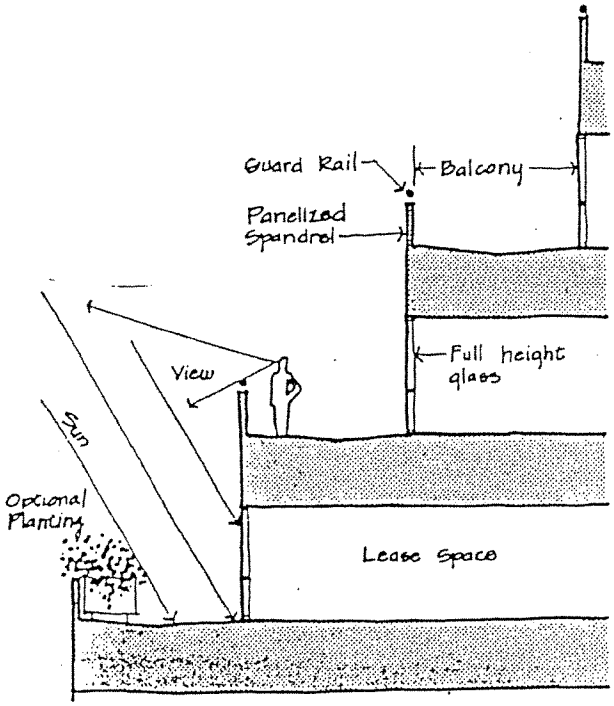


12 story building

The buildings will take on a variety o configurations but in all cases, each building will be compatible with other within the development. The architectu will reflect a balance of diversity (in form and materials) and uniformity (in function, scale and style). The buildings within the development will be interrelated by the repeated use of several design features.

1. Mass and Scale

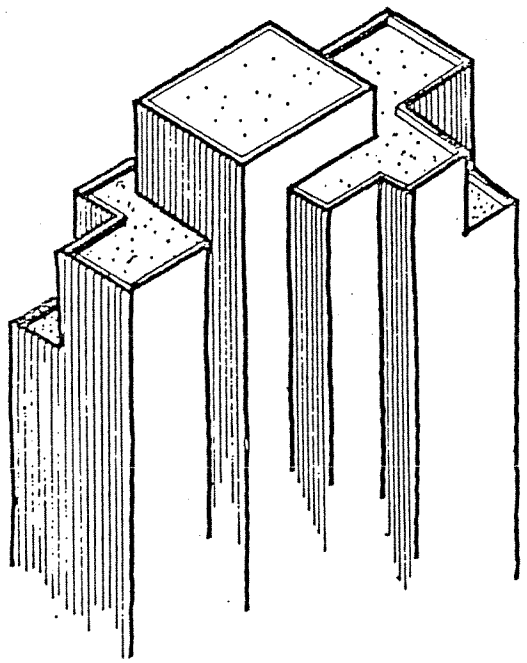
   The heights of the buildings could vary from six to twelve stories an floor areas from twenty thousand t thirty thousand square feet. To reduce the mass of each exterior elevation to several harmonious geometric features can be used. Th mass of the buildings could be compressed, chamfered, notched, and sculptured to reduce siteline exposures, and to maximize views.

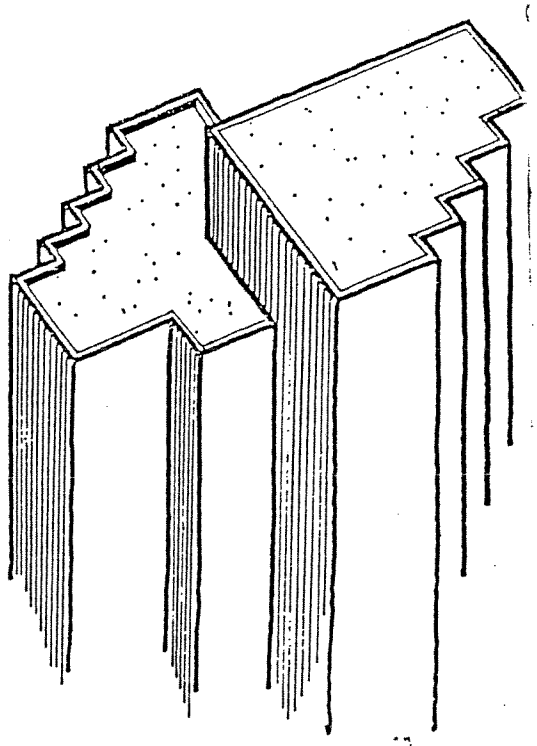


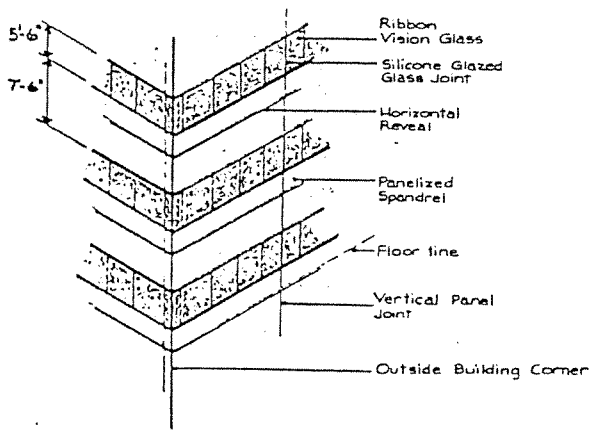
2. Form

The style of architecture could b very contemporary with the design stressing grandeur of simple form These simple forms, articulated t reduce mass, could be a strong, unifying element of Sierra Point. These same forms could be further articulated by creating exterior balconies, terraces and many corn office spaces which increase the tenants' contact with the Bay and the Brisbane Marina.

Balconies could typically step ba from floor to floor to reduce the apparent height and mass of the building and to provide more ligh to the lower balcony surfaces.







3. Materials

Traditional building materials should be used throughout the project. Each of the buildings would have a steel frame structure with a panelized curtain wall system for the exterior. With the steel frames it is anticipated that floor to floor heights of approximately thirteen feet will prevail. Therefore, the extent of glass areas will be constant from building to building. Continuous horizontal fenestration can be featured to take advantage of the spectacular views. Tinted or low reflectance, energy efficient glass should be utilized. Alternating bands of glass and warm panels are appropriate for this site, and their use will unify the various buildings. These exterior panels could be made of precast concrete, brick, metal or tile veneer.

4. Building Colors

The buildings will be interrelated by the common use of traditional building exterior colors. Although the various buildings may be encased with different skin materials, the colors and visual perception of all buildings will harmonize with each other.

Building colors should be drawn from a common palette of colors which are complementary. Warm earth tones, neutral colors and some pastels could be utilized. The use of shiny, highly metallic or reflected materials should be minimized. Accent colors at balcony railings, metal soffits and aluminum windowalls can be judiciously used to further define the geometry of and add character to each individual building.

Design Details

The unique character of Sierra Point and its associated design problems require special attention to details, many of which have been especially developed for this project.

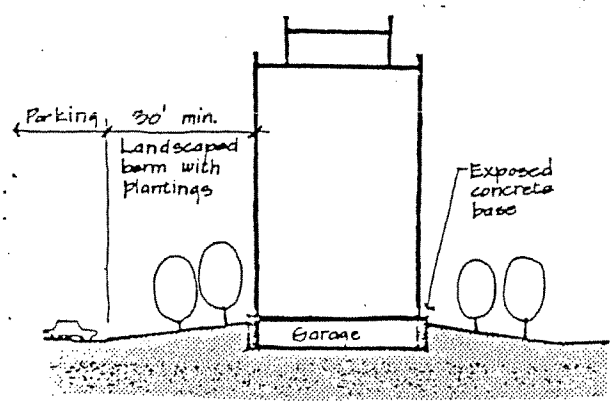
1. BUILDING ENTRANCES

Because of unique site soil conditions, all buildings could incorporate similar concrete entry bridges connecting the building entrance stairs with the on-grade interlocking concrete paved entry walks. Entrances, designed to maximize pedestrian flow towards the buildings, should feature attractive, spacious planters fully integrated into the overall building architecture.

Definition of the entries is important to the arrival sequence. Major building entrances should be articulat to create an inviting, exciting space which will attract people without confusion.

2. BUILDING BASE

All office buildings should incorporate one level of subterranean parking. The topmost portion (±30 inches) of the exterior face of the concrete garage can be exporsed above grade. The exposed concrete garage wall will be visually interpreted as a base or pedestal from which the building rises. The repeated use of this base, with horizontal reveals to create light and shadow effects, will act as a unifying architectural element. A gradually sloping, landscape area will surround the building and act as a transition space between the parking area and the building face.



3. EQUIPMENT

The buildings and surrounding site improvements are highly visible from within the site and from U.S. 101 and Old Bayshore Highway. This visibilit due to the openess of the project requires special treatment of mechani cal equipment and service areas. Mechanical equipment, exposed duct-work-and rooftop equipment, regardles of building height, should be conceal Trash enclosures, utility meters and other service devices should be locat away from building entrances. Utilit equipment can be screened by the use of landscaping, while trash receptacl should be enclosed by attractive masonry or wooden enclosures.

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Summary of Architectural Guidelines

1. The building architecture should reflect a carefully controlled balance of diversity with a repetition of design features and details which will foster continuity.

2. The mass of the buildings must be controlled by articulation of each exterior elevation to reduce site-line exposures.

3. Major unifying elements in the building design should be featured by simple, sculptured forms with chamfered and notched elevations and exterior balconies and terraces.

4. Continuous horizontal fenestration with tinted or low reflected energy efficient glass should be utilized to take advantage of the spectacular views.

5. The exterior panels forming the building skin should be made of precast concrete, brick, metal or tile veneer utilizing warm earth tones, neutral colors and some pastels. Avoid the use of shiny, highly metallic or reflective materials.

6. Incorporate concrete entry bridges connecting the building entrance stairs with on-grade entry walks to span the landscaped areas.

7. Conceal all mechanical equipment and exposed ductwork; screen all utility equipment and trash receptacles.

Appendix B-2

Agreement Concerning Project Approval Documents for Sierra Point and First, Second and Third Amendments

RESOLUTION NO. 97-69

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE APPROVING THE "AGREEMENT CONCERNING PROJECT APPROVAL DOCUMENTS" FOR SIERRA POINT AND AUTHORIZING EXECUTION OF SAID AGREEMENT ON BEHALF OF THE CITY

WHEREAS, a proposed "Agreement Concerning Project Approval Documents" ("the Agreement") between Sierra Point Associates, Two, the City of Brisbane, the Redevelopment Agency of the City of Brisbane, and Metropolitan Life Insurance Company, has been presented to the City Council concerning the various project approval documents for the development and financing of Sierra Point, including the Subdivision Agreement, the Development Agreement, the Ground Lease, and the Lease and Leaseback Agreement, as identified therein; and

WHEREAS, the City Council has reviewed and considered the terms and conditions of the proposed Agreement, a true copy of which is attached hereto as Exhibit "A" and incorporated herein by reference, and has determined that it would be in the best interest of the City to execute the Agreement and the various consents to the assignment of the project approval documents attached thereto as Exhibits A, B, and C,

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brisbane as follows:

1. The Agreement Concerning Project Approval Documents attached hereto as Exhibit "A" is hereby approved in all respects.

2. The Mayor is hereby authorized and directed to execute the Agreement, for and on behalf and in the name of the City of Brisbane, together with the consents to the assignment and assumption of the Agreement, the Subdivision Agreement, and the Development Agreement in the form of Exhibits A and C attached to the Agreement.

* * * *

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Brisbane held on the 22nd day of December, 1997, by the following vote:

AYES: Councilmembers Bologoff, Conway, Richardson, Waldo, and Mayor Panza
NOES: None
ABSENT: None
ABSTAIN: None

Mayor
Lee J. Panza

ATTEST:

City Clerk
Sheri Marie Schroeder

APPROVED AS TO FORM:

City Attorney

AGREEMENT CONCERNING PROJECT APPROVAL DOCUMENTS

This Agreement Regarding Project Approval Documents ("Agreement") is made by and between SIERRA POINT ASSOCIATES TWO ("SPA Two"), the CITY OF BRISBANE ("the City"), the REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE ("the Agency"), and METROPOLITAN LIFE INSURANCE COMPANY, as successor by merger to New England Mutual Life Insurance Company. This Agreement is effective as of the date stated in Section 9 below.

RECITALS

A. SPA Two owns six (6) parcels of undeveloped property at Sierra Point in the City of Brisbane, and an undeveloped parcel in the City of South San Francisco, acquired with other property at Sierra Point from Sierra Point Development Company ("SPDC"), the original developer of Sierra Point.

B. The City has granted certain approvals for the development of Sierra Point and the developers of Sierra Point have agreed to certain obligations with respect thereto.

C. The approvals and agreements are set forth in Project Approval Documents, including the Brisbane Marina Development Agreement, the Development Agreement, the Subdivision Agreement, the Ground Lease, and the Lease and Leaseback Agreement.

D. SPA Two contemplates sale of its property to Sierra Point, LLC, a Delaware limited liability company, or to other Buyer or Buyers, and in connection therewith, SPA Two desires to assign future obligations under the Project Approval Documents to the Buyer or Buyers, with the prior consent to such assignment being given by the City and the Agency.

E. SPA Two, the City, and the Agency desire to make provision for the performance of certain outstanding obligations of the developer under the Subdivision Agreement and other matters under the Project Approval Documents, as hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual agreements and other good and valuable consideration, receipt of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS.

As used in this Agreement, the following terms shall have the meaning given in this section:

(a) "Agency" means the Redevelopment Agency of the City of Brisbane, a public agency of the State of California.

(b) "Agency Property" means Parcel 2 and Parcel 7, as shown on the parcel map recorded in Book 54 of Parcel Maps, Pages 57-58, Official Records of San Mateo County, California.

(c) "Brisbane Marina Development Agreement" means the Brisbane Marina Development Agreement between the City, the Agency, Byron H. Lasky and John Sullivan, and SPDC, dated September 10, 1979.

(d) "Buyer" means Sierra Point, LLC, a Delaware limited liability company, having Opus West, a Minnesota corporation, as one of its members, or other buyer specifically approved by the City and the Agency as the assignee of SPA Two's obligations under the Project Approval Documents.

(e) "City" means the City of Brisbane, a municipal corporation.

(f) "Development Agreement" means the Development Agreement between the City, Sierra Point Associates One ("SPA One"), and SPA Two, dated March 29. 1984, together with Use Permit No. UP-11-78 granted by the City, a copy of which is attached to the Development Agreement as Exhibit "E" (the "Use Permit"), and the Architectural Design Guidelines, a copy of which is attached to the Development Agreement as Exhibit "F" (the "Design Guidelines").

(g) *"Force Majeure"* means weather or other acts of God, labor dispute, materials shortages (i.e., such items cannot be obtained at normal costs within a reasonable time due to limited availability), inability to obtain permits or approvals from other governmental agencies having jurisdiction over the work (e.g. San Mateo County Dept. of Environmental Health, Regional Water Quality Control Board, or the Army Corps of Engineers), or any other cause beyond the reasonable control of SPA Two.

(h) "Ground Lease" means the Ground Lease Agreement between the Agency and SPA Two dated March 29, 1984.

(i) "Lease and Leaseback Agreement" means the Lease and Leaseback between the Agency, the City, SPA Two, and New England Mutual Life Insurance Company, dated as of March 29, 1984, as amended thereafter.

(j) "Marina" means the Brisbane Marina operated by the Agency and the City at Sierra Point.

(k) "Metropolitan Life Insurance Company" means Metropolitan Life Insurance Company, a New York corporation. as successor by merger to New England Mutual Life Insurance Company.

(l) "Project Approval Documents" means the various permits, approvals and agreements concerning the subdivision, development, and financing of Sierra Point and the Marina, including each of the following:

(1) The Brisbane Marina Development Agreement, as defined in Section 1(c);

(2) The Development Schedule and Marina Facility Financing Agreement, dated April 24, 1981, between City, Agency, the Brisbane Bayfront Public Facilities Corporation, and SPDC;

(3) The Inducement Agreement, dated November 14, 1983, between City, Agency, the Brisbane Bayfront Public Facilities Corporation, and the Koll Company;

(4) The Development Agreement, as defined in Section 1(f);

(5) The Ground Lease, as defined in Section 1(h);

(6) The Lease and Leaseback Agreement, as defined in Section 1(i); and

(7) The Subdivision Agreement, as defined in Section 1(o).

(m) "Sierra Point" means the areas of land respectively described in Exhibits A and B to the Development Agreement as Property One and Property Two (i.e. the portion thereof located within the City of Brisbane), which also constitutes a part of Project Area Number One established under the Redevelopment Plan adopted by the Agency on December 6, 1976.

(n) "SPA Two" means Sierra Point Associates Two, a California general partnership whose general partners are Koll Sierra Point Partners Two and Metropolitan Life Insurance Company, successor by merger to New England Mutual Life Insurance Company.

(o) "Subdivision Agreement" means the Subdivision Agreement between SPA Two, the City, and the Agency, dated as of September 17, 1985.

2. SUBDIVISION AGREEMENT OBLIGATIONS.

(a) Cash Payment in Lieu of Relocation of Maintenance Buildings. SPA Two shall make a cash payment to the City in the amount of Three Hundred Fifty Thousand Dollars ($350,000), in complete satisfaction of the obligation to relocate the maintenance buildings, as described in Phase B-2 of Exhibit D to the Subdivision Agreement. The City shall vacate and surrender the maintenance buildings to SPA within one hundred twenty (120) days from the Effective Date of this Agreement; *provided, however,* that in the event SPA Two or the Buyer requires access to the property on which the maintenance buildings are located for the purpose of constructing any improvements thereon, SPA Two or the Buyer shall give the City at least 30 days prior notice of the date on which construction work is scheduled to commence and the City shall vacate and surrender the maintenance buildings prior to such date, but in no event later than 120 days after the Effective Date of this Agreement. The cash payment shall be deposited into escrow at the closing on the sale of SPA Two's property and any interest that may accrue thereon shall be payable to SPA Two. The

deposit, exclusive of interest, shall be disbursed to the City concurrent with the City's delivery of possession of the maintenance buildings to SPA Two or the Buyer. The maintenance buildings shall be removed by SPA Two or a buyer of the parcel where the buildings are located.

(b) Construction of Marina Parking Facilities. SPA Two shall construct paved parking and related landscaping and other improvements for the Marina on the Agency property ("Marina Parking"), as described in Phase B-2 of Exhibit D to the Subdivision Agreement, in accordance with plans and specifications for the Marina Parking approved by the City Engineer. The Marina Parking work shall be completed on or before the dates stated in the schedule set forth in Section 3 of this Agreement, subject to issuance of any required permits or approvals by City and any other governmental agencies having jurisdiction over the work, and subject to *force majeure* delays. Security for performance of the Marina Parking work shall be provided in accordance with Section 4 of this Agreement.

(c) South Shore Landscaping. SPA Two shall complete the South Shore Landscaping, as described in Phase C-1 of Exhibit D to the Subdivision Agreement, in accordance with plans and specifications approved by the City Engineer. The South Shore Landscaping work shall be completed on or before the dates stated in the schedule set forth in Section 3 of this Agreement, subject to issuance of any required permits or approvals by City and any other governmental agencies having jurisdiction over the work, and subject to *force majeure* delays. Security for performance of the South Shore Landscaping work shall be provided in accordance with Section 4 of this Agreement.

(d) Shoreline Court. SPA Two shall complete construction of Shoreline Court, as described in Phase D-1 of Exhibit D to the Subdivision Agreement, in accordance with plans and specifications approved by the City Engineer. Schematic plans for Shoreline Court shall be delivered to the City within 60 days after the execution of this Agreement. The City shall review such plans and provide comments within 15 business days after receipt of the same. Final plans and specifications shall be delivered to the City within 30 days after receipt by SPA Two of City's comments on the schematic plans. Subject to issuance of any required permits or approvals by City and any other governmental agencies having jurisdiction over the work, and subject to *force majeure* delays, the Shoreline Court work shall be completed on or before the first to occur of: (i) November 30, 1998; or (ii) occupancy of any development of the parcels adjacent to Shoreline Court which require such street as a means of access to the site. Security for performance of the Shoreline Court work shall be provided in accordance with Section 4 of this Agreement.

(e) Drainage Facilities. SPA Two shall install the following improvements to provide drainage for the parcel owned by Hitachi America, Ltd. ("Hitachi Parcel") and the adjacent parcel:

(1) A new line into an existing City storm drain in Marina Boulevard and a new line from Marina Boulevard to the northern dike ("Storm Drain System-Hitachi"). The new storm drainage line from Marina Boulevard to the northern dike shall be installed within a public utility easement granted to the City by Foster Enterprises, such easement to be in form and substance approved by the City Engineer and the City Attorney and to be executed and recorded prior to or concurrently with the effective date of this Agreement. The Storm Drainage

System-Hitachi shall be constructed in accordance with plans and specifications approved by the City Engineer and shall be completed on or before January 15, 1998, subject to *force majeure* delays.

(2) A new storm drainage line in Sierra Point Parkway and a new line along the Shoreline Court right of way to the southern dike ("Storm Drain System-South Shore"). The Storm Drainage System-South Shore shall be constructed in accordance with plans and specifications approved by the City Engineer and shall be completed on or before September 30, 1998, subject to issuance of any required permits or approvals by City and any other governmental agencies having jurisdiction over the work, and subject to *force majeure* delays. SPA Two may assign to the Buyer the obligation to install the Storm Drain System-South Shore.

Security for performance of the Storm Drain System-Hitachi work and the Storm Drain System-South Shore work shall be provided in accordance with Section 4 of this Agreement.

Upon: (i) completion of construction of the Storm Drain System-Hitachi, acceptance of such improvements by the City Engineer, recordation of the public utility easement in favor of the City over the Foster Enterprises property, and expiration of the warranty period against defects in workmanship or materials with respect to the completed Storm Drain System-Hitachi with no outstanding claims by the City for the performance of any corrective work; and upon (ii) written assumption by the Buyer of SPA Two's property of the obligation to construct the Storm Drain System-South Shore and the posting of security for the performance of such work in accordance with the requirements set forth in Section 4 of this Agreement, including security for the correction of defects during the warranty period, the City and the Agency acknowledge that SPA Two shall have no further obligation for the construction of new public storm drainage improvements at Sierra Point.

(f) Remaining on-site sanitary sewer and watermain facilities. SPA Two shall construct any remaining on-site sanitary sewer and watermain facilities which constitute a part of the improvements described in Phase B-1 of Exhibit D to the Subdivision Agreement, as determined by the City Engineer ("Sewer and Water Facilities"). Plans and specifications for the Sewer and Water Facilities shall be submitted at the time application for a building permit to construct the same is filed with the City. The Sewer and Water Facilities shall be completed concurrent with development of Lots 4 and 5, but in no event later than September 30, 2000. Security for performance of the Sewer and Water Facilities, satisfying the requirements set forth in Section 4 of this Agreement, shall be furnished to the City prior to the issuance of any building permits for development of Lots 4 and 5, or prior to issuance of permits for the construction of the Sewer and Water Facilities, whichever shall first occur.

3. CONSTRUCTION SCHEDULE

The public improvements referred to in Paragraphs (b), (c), (d) and (e) of Section 2 of this Agreement shall be constructed and completed in accordance with the following schedule:

Delivery of plans to City:	
Marina Parking Facilities Final Plans and Specifications	December 31, 1997
South Shore Landscaping Final Plans and Specifications	December 31, 1997
Delivery of plans to City (Cont'd):	
Shoreline Court Concept Plan	60 days from effective date of this Agreement
Storm Drain System-South Shore	60 days from effective date of this Agreement
Review of plans by City:	15 business days from receipt
Delivery of final or corrected plans to City	30 days from receipt of City's comments on submitted plans
Completion of work:	
Marina Parking Facilities	September 30, 1998
South Shore Landscaping	September 30, 1998
Shoreline Court	November 30, 1998, or occupancy of adjacent parcels, whichever is first
Storm Drain System-Hitachi	January 15, 1998
Storm Drain System-South Shore	September 30, 1998
Remaining on-site Sanitary Sewer and Watermain Facilities	September 30, 2000, or issuance of building permits for Lots 4 &5, whichever if first

4. IMPROVEMENT SECURITY

(a) The City and the Agency acknowledge that security for performance of the Storm Drain System-Hitachi, in form and amount satisfactory to the City Engineer, has already been furnished by SPA Two to the City. Security for the performance of SPA Two's obligations to construct and maintain the Marina Parking Facilities, the South Shore Landscaping, Shoreline Court, and the Storm Drain System- South Shore, in an amount

acceptable to the City Engineer (based upon the estimated cost to construct the improvements in accordance with the approved conceptual plans or final plans and specifications, as the case may be, and including a 20% contingency allowance), shall be delivered to the City in accordance with the following:

(1) Security for the Marina Parking Facilities and the South Shore Landscaping shall be delivered upon the earlier of: (i) close of escrow for sale of SPA Two's property to the Buyer, or (ii) December 31, 1997.

(2) Security for Shoreline Court and the Storm Drain System - South Shore shall be delivered within 60 days after the effective date of this Agreement. Upon approval by the City of the final plans and specifications for the work, the security shall be adjusted for any changes to the cost estimate approved by the City Engineer and if any increase is required, the additional security shall be delivered within 15 days after a written request for such additional security is made by the City Engineer, or at the time an application for a building permit for any of the work is submitted to the City, whichever comes first. If the final cost estimate for Shoreline Court and the Storm Drain System - South Shore is less than the security initially delivered to the City, the security may be reduced or replaced to release the amount of the excess.

(b) The security shall be, at the option of SPA Two or the Buyer, in the form of the City's standard form of performance and payment bonds, cash, or irrevocable and unconditional letters of credit, any and all such security to be in form and substance approved by the City Engineer and the City Attorney. The security shall include, or provide for, continuation in force following completion of the improvements during any applicable warranty or guaranty period, in such amount as required by Section 15 of the Development Agreement. Improvements shall be deemed completed upon written acceptance thereof by the City Engineer.

(c) In the event of any failure by SPA Two or the Buyer to furnish any security in the amount and at the time as required by this Agreement, such failure shall constitute a material default hereunder and in addition to any other rights and remedies that may be available to the City and the Agency under the Project Approval Documents, the City shall be entitled to withhold the issuance of any building permits for any development within Sierra Point by SPA Two or the Buyer, or their successors in interest, until all security for the public improvements required by this Agreement has been delivered to the City and accepted as to form and content by the City Engineer and the City Attorney.

5. ASSIGNMENTS OF PROJECT APPROVAL DOCUMENTS

(a) Subdivision Agreement. The City will consent to assignment of the Subdivision Agreement to the Buyer or Buyers of all SPA Two's property at Sierra Point, so long as the Buyer assumes all obligations of SPA Two under the Subdivision Agreement and this Agreement. Such consent shall be evidenced by the City's execution and delivery to the Buyer of an Assignment and Assumption, in the form of EXHIBIT "A" attached hereto, provided that such Assignment and Assumption has first been duly executed on behalf of

SPA Two and the Buyer. Any security provided to the City by SPA Two hereunder shall be released upon such Assignment and Assumption having been executed by all of the parties thereto and delivery by the Buyer to the City of improvement security meeting the requirements set forth in Section 4 of this Agreement and delivery to the City of all insurance coverages required by Section 18 of the Subdivision Agreement. Upon such assignment and assumption and delivery by the Buyer of security and evidence of insurance, SPA Two shall be released from the obligation to construct the public improvements described in Section 2 of this Agreement.

(b) Ground Lease. At close of escrow for sale of SPA Two's property, the City will consent to assignment of the Ground Lease to the Buyer by execution and delivery of the Consent to Assignment of Ground Lease and Estoppel Certificate in the form of EXHIBIT "B" attached hereto.

(c) Development Agreement. The City will consent to assignment of SPA Two's rights and obligations under the Development Agreement to the Buyer of SPA Two's property, and (subject to satisfaction by SPA Two of all requirements provided in Sections 2, 3 and 4 of this Agreement) the City shall acknowledge that the Development Agreement is in full force and effect and there are no outstanding defaults thereunder. Such consent and acknowledgment shall be made by the City's execution and delivery to the Buyer of the Consent to Assignment of Development Agreement and Estoppel Certificate in the form of EXHIBIT "C", attached hereto, provided that the Buyer has first assumed in writing all of the developer's rights and obligations under the Development Agreement pursuant to an assignment and assumption in form and content approved by the City Attorney.

(d) Lease and Leaseback Agreement. The City and the Agency acknowledge and agree that:

(1) The maintenance building relocation obligations under Sections 6.1 to 6.6 of the Lease and Leaseback Agreement shall be discharged by the cash payment to be made to the City in accordance with Section 2(a) of this Agreement; and

(2) The parking replacement obligations under Sections 6.1 to 6.6 of the Lease and Leaseback Agreement shall be discharged by completion of the Marina Parking pursuant to Section 2(b) of this Agreement; and

(3) The assignee of the Ground Lease and the Buyer of SPA Two's property shall be a third party beneficiary of the City's covenants under Article 10 of the Lease and Leaseback Agreement to provide public parking for the Ground Lease Commercial Area and to operate the Marina; and

(4) The Buyer shall be a third party beneficiary of the covenants by the City and the Agency under Articles 2 and 3 of the Lease and Leaseback regarding application of the Agency's revenues toward payment of Local Improvement District 79-1 assessments, which constitute a lien against the property purchased from SPA Two by Buyer.

The City and the Agency consent to assignment and assumption by the Buyer of the obligation for provision of short-term parking for the Marina under Section 6.7 of the Lease and Leaseback Agreement until completion of the Marina Parking.

The parties acknowledge that no assignment of the Lease and Leaseback Agreement is being made by SPA Two to the Buyer. Accordingly, it is understood that this Agreement shall have no affect upon the liability of SPA Two to pay the Deficit in Semiannual Debt Service required by the terms of the Lease and Leaseback Agreement, nor shall this Agreement have any effect upon the liability of the Agency to pay Deferred Rent in accordance with the terms of the Lease and Leaseback Agreement and if any such rent should become payable, SPA Two and not the Buyer shall continue to be entitled to receipt of the same.

6. MASTER PLAN

The City acknowledges and agrees that the Design Guidelines, which include a Conceptual Master Plan for Sierra Point, adopted as part of the Development Agreement, establish overall limits on development (in terms of land uses, square footage, parking, and other development standards), but that transference of land uses and intensities of development from one parcel to another parcel can be made with the prior approval of the City. Such transfer may require an amendment to the Master Plan and design review approval and will be evaluated by the City on a case by case basis. Transfers of land uses can only be made from one specific parcel to another specific parcel and any land use which is eliminated or reduced in intensity from one parcel without concurrently being assigned to another parcel cannot thereafter be reestablished or intensified on a different parcel.

7. TRANSIT FACILITY LOCATION

The City shall vacate the existing offer of dedication of one acre of land made with respect to Lot 4 on the Final Subdivision Map for Sierra Point, recorded at Book 110 of Maps at Pages 54-58, upon recordation of a conveyance or dedication to the City of an alternative one acre site acceptable to the City or upon the making of a cash payment to the City, in an amount mutually agreed upon by the parties, in lieu of the dedication of an alternative site.

8. MAINTENANCE OF CERTAIN PUBLIC IMPROVEMENTS

SPA Two and City agree that upon completion of the remaining landscape and lighting improvements to be constructed pursuant to the Project Approval Documents and this Agreement, the parties shall execute and record a maintenance agreement providing for such facilities to be operated and maintained through the existing Landscape and Lighting District for Sierra Point, subject to compliance with any applicable requirements of Proposition 218, or through assessments levied by the Sierra Point Owners' Association, with appropriate amendments to the CC&R's, or such other mechanism as may be agreed upon by the parties.

9. EFFECTIVE DATE

This Agreement is effective as of the date on which the City Council of the City of Brisbane and the Board of the Redevelopment Agency for the City of Brisbane adopt a joint resolution or separate resolutions approving this Agreement and authorizing the execution and delivery of this Agreement and the exhibits attached hereto by the Mayor of the City and the Chair of the Agency.

10. MISCELLANEOUS PROVISIONS

(a) Notices. Any notice, consent or approval required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given upon (i) hand delivery or (ii) one (1) business day after being deposited with Federal Express or another reliable overnight courier service or transmitted by facsimile telecopy, and addressed as follows:

If to City or Agency:	City of Brisbane 50 Park Lane Brisbane, CA 94005
With a Copy to:	Harold S. Toppel Atkinson - Farasyn P.O. Box 279 Mountain View, CA 94042
If to SPA Two:	SPA Two c/o Gibson Speno Company 1731 Technology Drive. Suite 340 San Jose, CA 95110 Attn: David Lazzarini
With a copies to:	Metropolitan Life Insurance Company 101 Lincoln Centre Drive Foster City, CA 94404 Attn: LindaMarie Santiago Attn: Mark T. Pallis
With a copy to:	Hallgrimson McNichols McCann, LLP 40 South Market Street, Suite 700 San Jose, CA 95113 Attn: Ron Rainey

or such other address as either party may from time to time specify in writing to the other.

(b) Successors and Assigns. Neither party shall assign this Agreement without the consent of the other party, which consent may be withheld at the sole discretion of the party whose consent is requested. Subject to the above, this Agreement shall be binding

upon and inure to the benefit of the parties hereto and their respective successors, heirs, administrators and permitted assigns.

(c) Amendments. Except as otherwise provided herein, this Agreement may be amended or modified only by a written instrument executed by all parties hereto.

(d) Effect on Project Approval Documents. Except as specifically modified or amended by the terms of this Agreement, all of the Project Approval Documents are expressly declared to remain in full force and effect.

(e) Attorneys' Fees. If either party hereto fails to perform any of its obligations under this Agreement or if a dispute arises between the parties hereto concerning the meaning or interpretation of any provision of this Agreement, then the defaulting party or the party not prevailing in such dispute shall pay any and all court costs or costs of arbitration and attorneys fees and disbursements incurred by the other party on account of such default and in enforcing or establishing its rights hereunder. Any such attorneys' fees and other expenses incurred by either party in enforcing a judgment in its favor under this Agreement shall be recoverable separately from and in addition to any other amount included in such judgment, and such attorneys' fees obligation is intended to be severable from the other provisions of this Agreement and to survive and not be merged into any such judgment.

(f) Time of the Essence. Time is of the essence of this Agreement.

(g) Exhibits. All exhibits attached hereto and referenced herein are incorporated into this Agreement and are made a part hereof

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

SPA TWO:
SIERRA POINT ASSOCIATES TWO,
a California general partnership

By: Koll Sierra Point Partners Two, a California limited partnership, general partner

By: The Koll Company, general partner

By:_____
General Partner

CITY:
CITY OF BRISBANE, a municipal corporation

By: _____
Mayor

ATTEST: _____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

By: The Koll Company,
general partner

By:_____
General Partner

MET LIFE:

Metropolitan Life Insurance Company,
successor by merger to New England
Mutual Life Insurance Company,
general partner

~~By: AEW Real Estate Advisors, Limited Partnership, a Massachusetts limited partnership, its investment advisor~~

By: _____
Its: ASSISTANT GENERAL COUNSEL

ATTEST: _____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

AGENCY:

REDEVELOPMENT AGENCY
CITY OF BRISBANE

By: _____
Agency Chair

ATTEST: _____
Agency Secretary

APPROVED AS TO FORM:

_____
Agency Council

MET LIFE:

Metropolitan Life Insurance Company,
successor by merger to New England
Mutual Life Insurance Company,
general partner

By: AEW Real Estate Advisors, Limited
Partnership, a Massachusetts limited
partnership, its investment advisor

By: _____

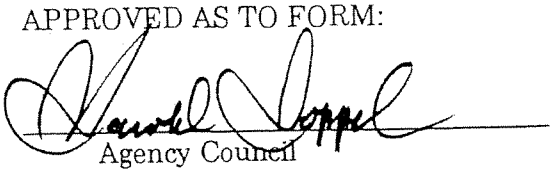
AGENCY:

REDEVELOPMENT AGENCY
CITY OF BRISBANE

By: _____
Agency Chair

ATTEST: _____
Agency Secretary

APPROVED AS TO FORM:



Agency Council

EXHIBIT "A"

FORM OF ASSIGNMENT AND ASSUMPTION OF SUBDIVISION AGREEMENT AND AGREEMENT CONCERNING PROJECT APPROVAL DOCUMENTS

To be attached - document to be drafted by Ron Rainey

EXHIBIT "B"

REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE

CONSENT TO ASSIGNMENT OF GROUND LEASE AND ESTOPPEL CERTIFICATE

The undersigned, as "Landlord" under that certain Ground Lease Agreement dated March 29, 1984 ("Ground Lease") made and entered into by and between the Redevelopment Agency of the City of Brisbane ("Agency" or "Landlord"), Sierra Point Associates Two, a California general partnership ("Tenant" or "SPA Two") for the premises more particularly described in Exhibit "A" to the Ground Lease ("Premises"), hereby delivers this Consent to Assignment of Ground Lease and Estoppel Certificate (the "Estoppel") to Sierra Point, LLC, a Delaware limited liability company ("Buyer") for the benefit of such entity and its members, and hereby certifies that each of the items described below are true and correct. Capitalized terms not otherwise defined herein shall be defined as provided in the Ground Lease.

1. Consent to Assignment. By its execution below, the Agency hereby approves of the assignment of the Ground Lease to Buyer in the form of Exhibit "1" attached hereto and made a part hereof.

2. Term. The Commencement Date of the Ground Lease was March 29, 1984. The initial eighty (80) year Term of the Ground Lease is scheduled to expire on March 28, 2064. Pursuant to Article 40 of the Ground Lease, there are two (2) options to extend the initial Term. The first extension term is ten (10) years and the second extension term is nine (9) years.

3. Ground Lease Execution and Amendments. A true and correct copy of the Ground Lease is attached hereto as Exhibit "2." The Ground Lease has been duly authorized, executed and delivered in the manner required by law and is in full force and effect and has not been modified, supplemented or amended in any way.

4. Authority. All approvals of the Agency required by law for the effectiveness of the Ground Lease and for the execution and delivery of this Estoppel have been obtained. The Ground Lease constitutes the legal, valid and binding obligation of Landlord enforceable in accordance with its terms.

5. Performance of Obligations by Tenant. As of the date hereof, there are no uncured defaults by Tenant under the Ground Lease and Landlord knows of no events or conditions which, with the passage of time, the giving of notice, or both, would constitute a default by Tenant under the Ground Lease.

6. Rent. Tenant has paid the prepaid rent of Two Million Dollars ($2,000,000) required to be paid under Article 3 of the Ground Lease for the initial term and has no further obligations thereunder with respect to any rental payments under Article 3 of the Ground Lease.

7. Repurchase Option Expired. Landlord's rights to repurchase set forth in Section 10.1 of the Ground Lease have expired and are of no further force and effect.

8. No Default of Landlord. To Landlord's knowledge, Landlord is not in default under the Ground Lease and Tenant has not delivered to Landlord any notice of default by Landlord under the Ground Lease.

9. No Claims. As of the date hereof, there are no uncured defaults by Tenant under the Ground Lease.

10. No Assignment. Landlord has not transferred, assigned, hypothecated or sublet all or any portion of its rights under the Ground Lease to any person or entity and fee title to the Premises is vested in Landlord. To the best of Landlord's knowledge, Tenant has not transferred, assigned, hypothecated or sublet all or any portion of its rights under the Ground Lease to any person or entity.

11. No Notices of Intent to Convey. Landlord has not delivered to Tenant any notices under Section 30.1 of the Ground Lease of the terms on which Landlord will be willing to sell the Premises.

12. Parking Rights. Tenant's rights to the nonexclusive use of the real property adjacent to the Premises as shown on Exhibit "D" to the Ground Lease for parking purposes are in full force and effect and there are no prior encumbrances or liens which would impair or diminish such parking rights. Agency confirms that it has not granted any rights to use or occupy such parking areas which are prior and superior to the rights of Tenant under the Ground Lease. Agency further confirms that the areas of commercial and marina parking shown on Exhibit "D" attached to the Ground Lease include Lots 2 and 7 as shown on Exhibit "A" attached to the Lease and Leaseback Agreement.

13. No Further Ground Lease. Landlord has not entered into any agreements with Tenant to lease to Tenant any additional real property which is adjacent to the Premises under the terms of Article 39 of the Ground Lease.

14. Notices. All notices to Tenant shall, after the date of the assignment of the Ground Lease to Buyer, will be given to Tenant at the following address:

To Buyer:

Sierra Point, LLC
c/o Opus West Corporation
6160 Stoneridge Mall Road, Suite 360
Pleasanton, CA 94588
Attn: Mr. John Greer
Telephone: (510) 463-9254
Facsimile: (510) 463-9368

With copy to:

Opus West Corporation
2415 East Camelback Road, Suite 800
Phoenix, AZ 85016-4201
Attn: Mr. Thomas W. Roberts, President
Telephone No.: (602) 468-7000
Facsimile No.: (602) 468-7045

And to:

Opus U.S. Corporation
2415 East Camelback Road, Suite 800
Phoenix, AZ 85016-4201
Attn: Daniel T. Haug, Esq.
Telephone: (602) 468-7000
Facsimile No.: (602) 468-7045

IN WITNESS WHEREOF, Landlord has executed this Consent to Assignment and Estoppel Certificate as of this ____ day of _____199___, and delivered this Estoppel Certificate to Buyer and hereby certifies that the statements contained herein are true and correct as of such date and acknowledges and agrees that Buyer may rely upon this Consent to Assignment and Estoppel Certificate in purchasing the leasehold interest under the Lease from Tenant and that this Certificate may be relied upon by any mortgagee, auditor, creditor, commercial banker, prospective purchaser sublessee or encumbrancer of the Premises or any portion thereof.

LANDLORD:

THE REDEVELOPMENT AGENCY
OF THE CITY OF BRISBANE

By: _____
Chair

ATTEST:

_____
Secretary

APPROVED AS TO FORM:

_____
Agency Counsel

EXHIBIT "C"

CITY OF BRISBANE CONSENT TO ASSIGNMENT OF DEVELOPMENT AGREEMENT AND ESTOPPEL CERTIFICATE

The undersigned, The City of Brisbane ("City") hereby delivers this Consent to Assignment of Development Agreement and Estoppel Certificate ("Development Agreement Assignment and Estoppel") in connection with that certain Development Agreement dated March 29, 1984 and recorded in the Office of the County Recorder of San Mateo County on May 11, 1984, as Document No. 84050693 ("Development Agreement") and entered into by and between the City of Brisbane, a municipal corporation of the State of California, and Sierra Point Associates One, a California general partnership ("SPA One") and Sierra Point Associates Two, a California general partnership ("SPA Two"). The City delivers this Consent to Assignment and Estoppel Certificate to Sierra Point, LLC, a Delaware limited liability company ("Buyer") for the benefit of such entity and its members. In consideration of Buyer's assumption of obligations under each of the Project Approval Documents, as defined in that certain Agreement Concerning Project Approval Documents, between SPA Two, the City, the Redevelopment Agency of the City of Brisbane, and Metropolitan Life Insurance Company, effective as of _____, the City hereby agrees and certifies as follows:

1. Consent to Assignment: By its execution and delivery of this Consent and Estoppel Certificate, the City hereby approves the Assignment and Assumption of the Development Agreement to Buyer in the form of Exhibit "1" attached hereto and made a part hereof. City acknowledges that Buyer shall the right to fully or partially assign its rights under the Development Agreement as provided by, and subject to compliance with, the provisions of Section 8 of the Development Agreement.

2. Effectiveness of Development Agreement: The Development Agreement has been duly authorized, executed and delivered in the manner required by law and is in full force and effect and not been modified, supplemented, suspended, superseded or amended in any way.

3. Authority : All notices, hearings, proceedings and approvals of the City required by law for the adoption of the Development Agreement have been given or conducted and the Development Agreement constitutes a legal, valid and binding obligation of the City enforceable in accordance with its terms and applicable State law.

4. Conceptual Master Plan: The Conceptual Master Plan ("Conceptual Master Plan") and Design Guidelines ("Design Guidelines"), incorporated by reference into the Development Agreement, are in full force and effect and have not been modified, superseded, supplemented, suspended, or amended, except for the modification of the Conceptual Master Plan resulting from realignment of certain streets and the land

exchange between the developer and the City pertaining to the City-owned parcels and the commercial parcels. Further development of parcels in accordance with the land use designations shown on the Conceptual Master Plan will require the approvals as set forth in Section 1.3 and 2.1 of the Development Agreement. Any proposed changes to the land use designation for each parcel may require an amendment to the Conceptual Master Plan.

5. Term: The term of the Development Agreement expires on December 31, 2005. There has been no earlier termination of the Development Agreement and no extensions of the Development Agreement have been granted by the City.

6. No Outstanding Defaults by Developer: As of the date hereof and subject to the full and complete performance by Spa Two of all of its obligations under the Agreement Concerning Project Approval Documents, any prior defaults by the Developer under the Development Agreement and the Subdivision Agreement have either been cured, or waived by the City, or the obligation which was the source of the default has been modified in a manner so as to eliminate the existing default. Consequently, as of the date hereof, there are no uncured outstanding defaults by the Developer under the Development Agreement or the Subdivision Agreement.

IN WITNESS WHEREOF, the City has executed this Consent to Assignment and Estoppel Certificate as of this _____ day of _____ 199__ and delivered this Estoppel Certificate to Buyer and hereby certifies that the statements contained herein are true and correct as of such date and acknowledges and agrees that Buyer may rely upon this Consent to Assignment and Estoppel Certificate and that this Certificate may be relied upon by any mortgagee, auditor, creditor, commercial banker, prospective purchaser, tenant, sublessee or encumbrancer of the Property or any portion thereof which is being acquired by Buyer.

CITY:

CITY OF BRISBANE

By: _____
Mayor

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

FIRST AMENDMENT
TO
AGREEMENT CONCERNING
PROJECT APPROVAL DOCUMENTS

THIS AGREEMENT, dated as of September 15, 1998, by and between the CITY OF BRISBANE, a municipal corporation ("City"), the REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE, a public agency ("Agency"), and SIERRA POINT, L.L.C., a Delaware limited liability company ("Developer"), is made with reference to the following facts:

A. City and Agency entered into a certain Agreement Concerning Project Approval Documents ("the Project Approval Agreement") with Sierra Point Associates Two ("Spa Two") and Metropolitan Life Insurance Company ("Met Life") pertaining to the development of six parcels of land owned by Spa Two and the construction of various public improvements within the area of the City of Brisbane commonly known as Sierra Point.

B. Developer has purchased said parcels of land from Spa Two and has assumed certain obligations of Spa Two and Met Life for the construction of public improvements in accordance with the provisions of the Project Approval Agreement.

C. As a result of exceptionally heavy and protracted rain during the last rainy season, the commencement of work on the public improvements at Sierra Point has been delayed beyond the date originally anticipated by the parties at the time the Project Approval Agreement was executed.

D. Developer has requested that the completion dates for the public improvements specified in the Project Approval Agreement be extended and that other technical amendments be made to said Agreement, and City and Agency are willing to do so, as hereinafter set forth.

NOW, THEREFORE, it is agreed as follows:

1. The date for completion of Shoreline Court, as set forth in Paragraph 2(d) of the Project Approval Agreement, is hereby extended from November 30, 1998 to August 30, 1999.

2. The date for completion of the Storm Drain System-South Shore, as described in Paragraph 2(e)(2) of the Project Approval Agreement, is hereby extended from September 30, 1998 to May 30, 1999.

3. The Sewer and Water Facilities described in Paragraph 2(f) of the Project Approval Agreement shall be constructed in accordance with the plans attached hereto as Exhibit "A" and made a part hereof, prepared by Brian Kangas Foulk, dated 4/24/98, entitled "Sierra Point Master Utility Plan - Proposed Sanitary Sewer System" and "Sierra Point Master Utility Plan - Proposed Water System - Alternative". Said plans and the

phases for performance of work set forth therein, shall supersede all prior plans and construction schedules relating to the Sewer and Water Facilities.

4. The following dates in the Construction Schedule for completion of work, as set forth in Paragraph 3 of the Project Approval Agreement, are hereby extended:

Marina Parking Facilities: Extended from September 30, 1998 to May 30, 1999.

South Shore Landscaping: Extended from September 30, 1998 to August 30, 1999.

Shoreline Court: Extended from November 30, 1998 to August 30, 1999, or occupancy of the adjacent parcels, whichever is first.

Storm Drain System-South Shore: Extended from September 30, 1998 to May 30, 1999.

5. By reason of the Water and Sewer Facilities to be constructed at Developer's expense, Developer shall be entitled to a credit against the water and sewer connection fees normally charged by City at the time applications for building permits are filed. The credit given with respect to each application shall be determined by the City Engineer, based upon the value of the Water and Sewer Facilities allocated to each parcel which is the subject of the permit application; *provided, however,* that in no event shall the amount of the credit exceed fifty percent (50%) of the connection fees that would otherwise be charged for such application in the absence of the credit.

6. The parties acknowledge that the Project Approval Agreement and the Project Approval Documents, as modified by this First Amendment, remain in full force and effect and that neither party has committed a default under any of said Agreements or Documents.

IN WITNESS WHEREOF, the parties have executed this First Amendment as of the date first above written.

CITY OF BRISBANE

By: _____
Mayor
Lee J Panza

ATTEST:

_____
City Clerk
Sheri Marie Schroeder

APPROVED AS TO FORM:

_____
City Attorney
Harold S. Toppel

Rev 9/3/98

SECOND AMENDMENT
TO
AGREEMENT CONCERNING
PROJECT APPROVAL DOCUMENTS

THIS SECOND AMENDMENT TO AGREEMENT CONCERNING PROJECT APPROVAL DOCUMENTS ("Agreement"), dated as of November 17, 2003, by and between the CITY OF BRISBANE, a municipal corporation ("City"), the REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE, a public agency ("Agency"), and SIERRA POINT, L.L.C., a Delaware limited liability company ("Developer"), is made with reference to the following facts:

A. City and Agency entered into a certain Agreement Concerning Project Approval Documents ("the Project Approval Agreement") with Sierra Point Associates Two ("Spa Two") and Metropolitan Life Insurance Company ("Met Life") pertaining to the development of six vacant parcels of land and various public improvements located with the area of City commonly known as Sierra Point.

B. Developer has purchased all of the property owned by Spa Two and Met Life at Sierra Point, including additional land located within the City of South San Francisco, and has assumed the obligations of Spa Two and Met Life under the Project Approval Agreement.

C. The terms of the Project Approval Agreement were modified by a First Amendment thereto dated September 15, 1998 ("First Amendment"), between City and Agency and Developer, which extended the time for completion of certain public improvements required to be constructed by Developer under the terms of the Project Approval Agreement.

D. Developer applied to the City of South San Francisco for land use approvals to divide the portion of Sierra Point located within South San Francisco, known as Lot 10, into four separate parcels and to construct thereon three office, research and development, and/or biotech buildings and a hotel (the "SSF Development"), such applications being collectively referred to by the City of South San Francisco as the Sierra Point Opus Master Plan and identified as MND-98-044, PM-98-044 and PUD-98-044. Subsequently, Developer applied to the City of South San Francisco to change the use of one of the parcels from hotel to office/research and development. Such application was approved as PUD 98-044/MOD1.

E. The Sierra Point Opus Master Plan was approved by the City Council of the City of South San Francisco on December 9, 1998, subject to certain Conditions of Approval and Mitigation Measures, to which reference is hereby made for the particulars thereof.

F. In order to mitigate potential adverse traffic impacts created by the SSF Development, the City of South San Francisco has required Developer to construct various public improvements within the City of Brisbane, it being understood and agreed by and between Developer, the City of Brisbane and the City of South San Francisco that Developer would enter into a separate agreement with the City of Brisbane providing for the construction of such improvements.

G. The SSF Development also includes the installation of landscape improvements along the shoreline within an area that will be open and accessible to the public and maintained by the City of Brisbane Sierra Point Landscape and Lighting District ("the L&L District).

H. City, Developer and the City of South San Francisco have entered into a certain Agreement to Provide Sanitary Sewer Service, recorded June 25, 1999 ("the Sewer Service Agreement"), wherein City agreed to furnish sanitary sewer service for each of the parcels in the SSF Development by allowing such parcels to connect to City's sanitary sewer system at the City Limit line, and further providing that all sanitary sewer facilities located within the SSF Development will be owned and maintained by the private owners of the parcels on which the facilities are installed and no portion of such facilities will be owned or maintained by either the City of Brisbane or the City of South San Francisco.

I. The parties desire to further amend the Project Approval Agreement to: (i) provide for the construction of the additional traffic improvements required as mitigation measures for the SFF Development; (ii) further extend the time for completion of certain public improvements and (iii) modify the description of the plans for the Sewer and Water Facilities, all as more particularly described below.

NOW, THEREFORE, it is agreed as follows:

1. Definitions. Words and phrases which have been defined in the Project Approval Agreement shall have the same meaning when used in this Agreement.

2. Description of Improvements. In addition to any and all other public improvements which Developer is required to construct under the terms of the Project Approval Documents, Developer shall construct and complete, at its own expense, each of the following:

(a) Install traffic signal and related improvements at the Sierra Point Parkway and Shoreline Court intersection (the "Sierra Point/Shoreline Signals) and the roadway improvements at the Highway 101 on and off ramps at Sierra Point Parkway (the "101/Sierra Point Signals"), in accordance with the "Sierra Point Parkway Phase II widening and Signalization Improvements" plans prepared by BKF dated April 4, 2002.

(b) Install traffic signals and related improvements at the Sierra Point Parkway and Lagoon Way intersection (the "Sierra Point/Lagoon Way Signals"), in accordance with the "Sierra Point Parkway Road Connection in San Mateo County in Brisbane at intersection with Lagoon Way" plans prepared by BKF dated November 30, 2001.

(c) Install traffic signal at the Highway 101 on and off ramps at Sierra Point Parkway (the "101/Sierra Point Signals"), in accordance with the "(Interim) Signal and Lighting Route 101 at Sierra Point Parkway" preliminary plans prepared by Fehr & Peers Associates dated April 4, 2000.

3. Construction Schedule. The Developer and the City have agreed that the items of work described in Section 2 above shall be performed and completed when the traffic counts reach the thresholds as shown on **Exhibit "A"**. The actual timing for the installation of the items of work described in Section 2 shall be subject to the determination by the City Engineer that, due to the amount of traffic, the improvements described in Section 2 should be installed. Developer shall furnish to City such additional traffic information and data as reasonably necessary for the City Engineer to make such determination. The City Engineer shall evaluate this information and shall make a decision based upon the information provided by Developer and based upon other information deemed pertinent and necessary by the City Engineer. Any such determination by the City Engineer will take into account, whether the traffic has exceeded the a.m. trips and p.m. trips as shown on **Exhibit "A".**

The completion of the work described in Section 2 above may be extended, in the discretion of the City Engineer, based upon any periods of delay in obtaining permits or approvals from any other governmental agencies having jurisdiction over the work, including, but not limited to, CalTrans and BCDC, which are beyond the reasonable control of Developer.

4. Extension of Completion Dates. The following dates in the Construction Schedule for completion of work, as set forth in Paragraph 3 of the Project Approval Agreement, as previously extended by the First Amendment to the Project Approval Agreement, are hereby revised as follows:

Marina Parking Facilities: Improvements complete and accepted by the City; provided, however, that under the Conditions of Approval adopted by the City of Brisbane under Resolution DP-1-03 of the Planning Commission of the City of Brisbane, Developer is required to resolve which trees in the shared use parking areas as depicted on **Exhibit "B"** which are deemed during the warranty period by the Director of Public Works to be defective are required to be replaced at the expense of the Developer.

In satisfaction of the foregoing condition, in the event the Director of Public Works deems the trees specified in the attached **Exhibit"B"** to be defective in the reasonable discretion of the Director of Public Works as of July 1, 2004, Developer agrees that it will replace such trees with an alternate species, such as the "Myoporum" at Developer's expense. The work, if any will be completed by Developer by September 30, 2004 or within a mutually satisfactory timeframe.

South Shore Landscaping: Shall be completed prior to occupancy of any building on Parcel 5, 6 or 7, subject to issuance of a permit, in a timely manner, by BCDC.

Shoreline Court: Improvements complete and accepted by the City.

Storm Drain System-South Shore: Improvement complete and accepted by the City.

5. Plans. The Sewer and Water Facilities described in Paragraph 2(f) of the Project Approval Agreement shall be constructed in accordance with the plans prepared by Brian Kangas Foulk, dated December 6, 2002, entitled "Sierra Point Master Utility Plan - Proposed Sanitary Sewer System" and "Sierra Point Master Utility Plan - Proposed Water System". Said plans and the phases for performance of the work set forth therein, shall supersede all prior plans and construction schedule relating to the Sewer and Water Facilities in the Project Approval Agreement.

6. Security for Performance of Additional Work. In addition to any other security which has been provided by Developer to City to assure completion of public or private improvements, Developer shall deposit with City security in the following amounts for performance of the additional public improvements described in Section 2 above:

101/Sierra Point Improvements and Sierra Point/Shoreline Signal:	$354,570
Sierra Point/Lagoon Way Signals:	$369,040
101/Sierra Point Signal	$150,000

The Security shall be, at the option of Developer, in the form of the City's standard form of performance and payment bonds, cash, or irrevocable and unconditional letter of credit, and shall be in form and substance

approved by the City Engineer and the City Attorney. The security shall include, or provide for, continuation in force following completion of the improvements during any applicable warranty or guaranty period of an amount equal to ten percent (10%) of the original amount of the security. The improvements shall be deemed completed upon written acceptance thereof by the City Engineer.

7. Approvals and Permits. All work shall be performed in accordance with plans and specifications approved by City. Prior to the commencement of construction, Developer shall obtain from City all permits and approvals required for performance of the work, including, but not limited to, building, grading, and encroachment permits. Developer shall pay all application fees, processing fees, plan check fees, permits fees, and any other fees or charges that may be payable in accordance with City's adopted fee schedule in effect as of the time such fee or charge become due.

8. Existing Agreement. Except as modified by this Agreement and as previously modified by the First Amendment, the Project Approval Agreement is declared to remain in full force and effect.

9. Third Party Beneficiary Enforcement Rights. The parties acknowledge that this Agreement constitutes an implementation of certain conditions of development approval imposed by the City of South San Francisco in connection with the granting of various land use entitlements for the SSF Development. Accordingly, the City of South San Francisco is expressly designated as a third party beneficiary of this Agreement, with a right to enforce Developer's obligations hereunder to the extent such obligations relate to the SSF Development. Developer shall cause the City of South San Francisco to be designated as a dual obligee on the performance and payment bonds or other security given pursuant to Section 6 of this Agreement. City agrees to provide the City of South San Francisco with a copy of any notice of default given to Developer for failure to perform any obligation hereunder (excluding Section 4, which is unrelated to the SSF Development).

[Remainder of Page Intentionally Left Blank]

Nothing herein shall be construed as a conferral of enforcement rights upon any other third party, nor shall the designation of the City of South San Francisco as a third party beneficiary hereunder affect or impair the rights of the City of Brisbane to enforce all of the terms and conditions of this Agreement in such manner as it deems necessary or appropriate.

IN WITNESS WHEREOF, the parties have executed this Second Amendment as of the date first above written.

CITY OF BRISBANE

By: _____
Michael Barnes, Mayor

Attest: _____
Sheri Marie Schroeder, City Clerk

APPROVED AS TO FORM:

_____
Harold S. Toppel, City Attorney

REDEVELOPMENT AGENCY
OF THE CITY OF BRISBANE

By: _____
Michael Barnes, Agency Chair

Attest: _____
Sheri Marie Schroeder,
Agency Secretary

APPROVED AS TO FORM:

_____
Harold S. Toppel, City Attorney

SIERRA POINT, L.L.C., a Delaware limited liability company

By: _____
Name: Thomas W. Roberts
Its: Vice President

APPROVED AS TO FORM:

LUCE, FORWARD, HAMILTON & SCRIPPS, LLP

By _____
Nancy T. Seull, Esq.
Counsel for Sierra Point, L.L.C.

EXHIBIT "A"

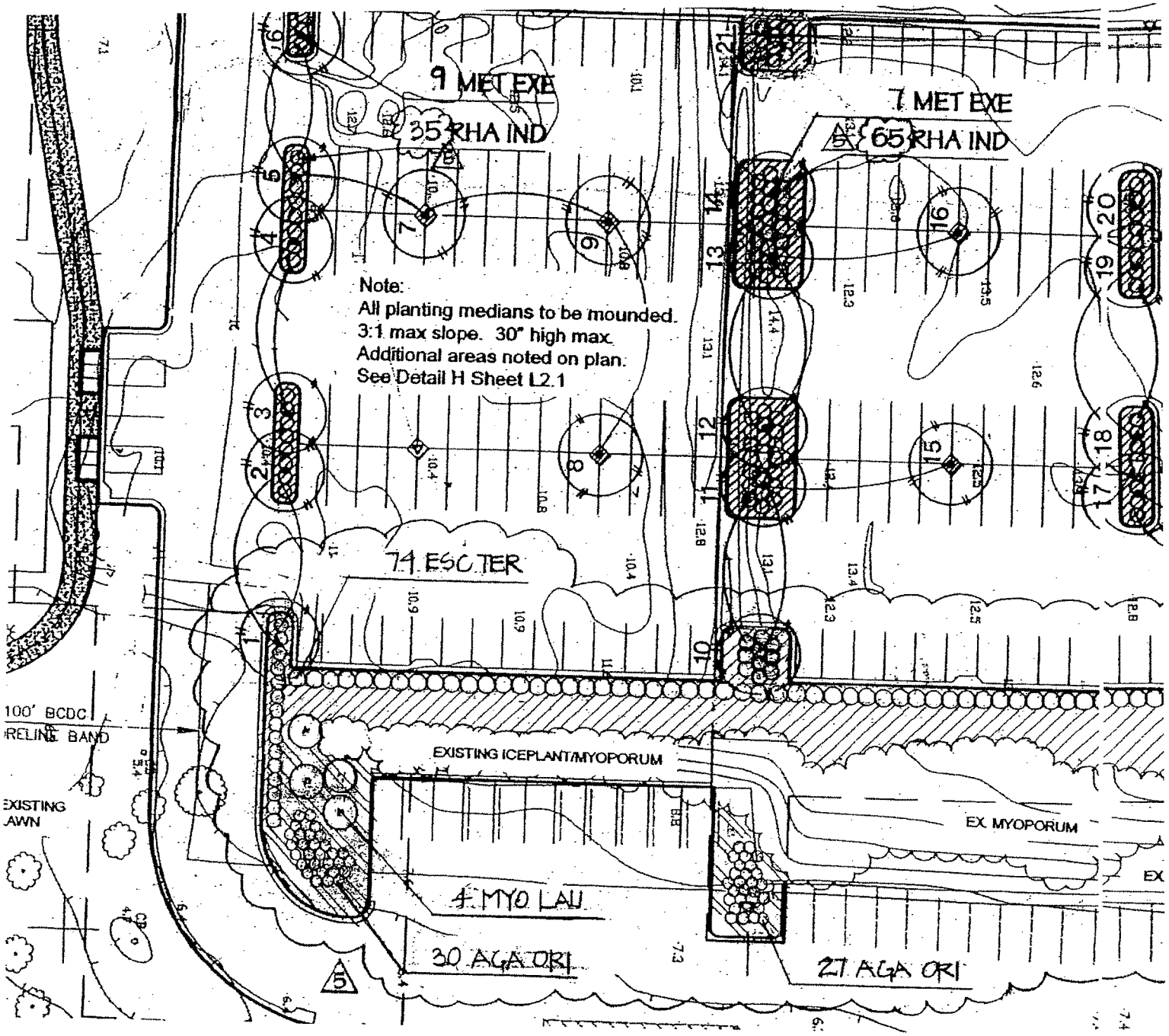
Intersection	Required Improvements
Sierra Point Parkway/Shoreline Court	If AM Trips are greater than 1680 or PM trips are greater than 1460, install the Sierra Point/Shoreline Signals as shown on the plans described in Section 2 of the Agreement
Sierra Point Parkway/US 101 NB Ramps	AM Trips are greater than 2200 or PM trips are greater than 1970, install the 101/Sierra Point Signals as shown on the plans described in Section 2 of the Agreement
Sierra Point Parkway/Lagoon Way	AM Trips are greater than 1590 or PM trips are greater than 1360, install the Sierra Point/Lagoon Way Signals as shown on the plans described in Section 2 of the Agreement

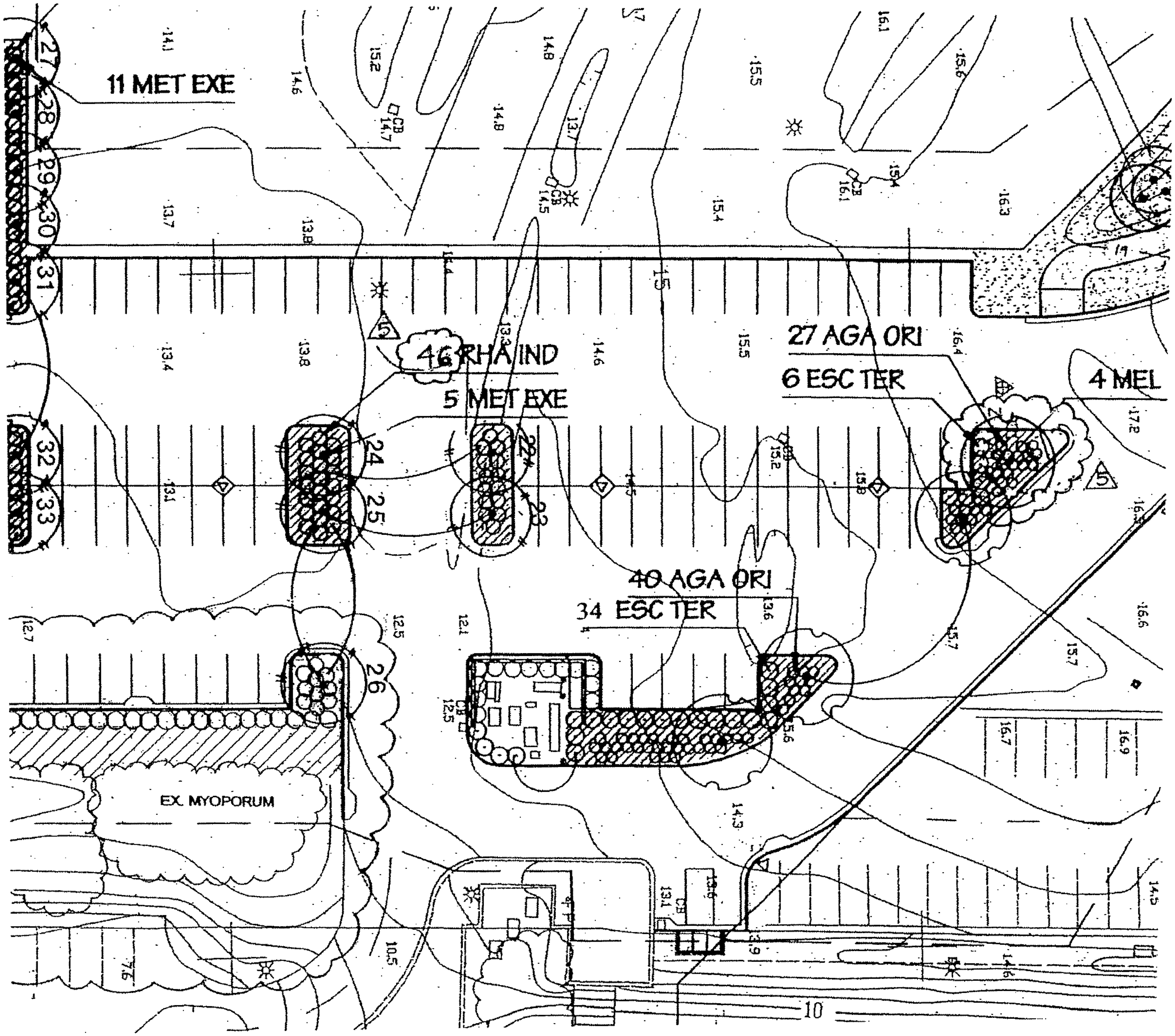
EXHIBIT "B"

Resolution DP-1-03/Marina Parking Facilities

Trees in Shared Use Parking Areas

[To be attached]


9 MET EXE
35 RHA IND
7 MET EXE
65 RHA IND
Note:
All planting medians to be mounded.
3:1 max slope. 30" high max.
Additional areas noted on plan.
See Detail H Sheet L2.1
74 ESC TER
100' BCDC
RELINE BAND
EXISTING
AWN
EXISTING ICEPLANT/MYOPORUM
EX. MYOPORUM
4 MYO LAU
30 AGA ORI
27 AGA ORI


11 MET EXE
46 RHA IND
5 MET EXE
27 AGA ORI
6 ESC TER
4 MEL
40 AGA ORI
34 ESC TER
EX. MYOPORUM
22
23
24
25
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THIRD AMENDMENT
TO
AGREEMENT CONCERNING
PROJECT APPROVAL DOCUMENTS

THIS THIRD AMENDMENT TO AGREEMENT CONCERNING PROJECT APPROVAL DOCUMENTS (this "Amendment"), dated as of November 7, 2005 (the "Effective Date"), by and among the CITY OF BRISBANE, a municipal corporation ("City"), the REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE, a public agency ("Agency"), and SIERRA POINT, LLC, a Delaware limited liability company ("Developer"), is made with reference to the following facts:

A. City and Agency entered into a certain Agreement Concerning Project Approval Documents (the "Project Approval Agreement") with Sierra Point Associates Two ("Spa Two") and Metropolitan Life Insurance Company ("Met Life") pertaining to the development of six (6) vacant parcels of land and various public improvements located within the area of the City commonly known as Sierra Point.

B. Developer has purchased all of the property owned by Spa Two and Met Life at Sierra Point and has assumed the obligations of Spa Two and Met Life under the Project Approval Agreement.

C. The terms of the Project Approval Agreement were modified by that certain First Amendment to Agreement Concerning Project Approval Documents dated September 15, 1998 (the "First Amendment"), among City, Agency and Developer, which extended the time for completion of certain public improvements required to be constructed by Developer under the terms of the Project Approval Agreement.

D. The terms of the Project Approval Agreement were further modified by a Second Amendment to Agreement Concerning Project Approval Documents dated November 17, 2003 (the "Second Amendment"), among City, Agency and Developer, which provided for the construction by Developer of additional public improvements and established various dates for completion of such improvements.

E. Adverse economic conditions have delayed construction of the Project, including various public improvements that would have been installed by Developer and accepted by City upon completion. Moreover, maintenance work is now required on certain improvements previously installed by Developer.

F. In order to maintain the existing public improvements in good condition and repair during the period of delay, City and Agency have required that interim maintenance and improvement work be performed by Developer, as hereinafter set forth.

NOW, THEREFORE, it is agreed as follows:

1. Definitions. Words and phrases which have been defined in the Project Approval Agreement shall have the same meaning when used in this Amendment.

2. Interim Improvement Work. Developer shall install and complete the following interim improvements (collectively, the "Interim Improvements") at the intersection of Sierra Point Parkway/Marina Boulevard/Shoreline Court (the "Intersection"):

(a) Provide three (3) permanent installations of stop signs on the right side of thru lanes for south leg, north leg, and west leg of the Intersection. Provide six (6) inch concrete curb/"pork chop" islands to protect signs.

(b) Install signing and striping of westbound leg of the Intersection per ultimate plan.

(c) Install striping within two hundred (200) feet of the Intersection, except as follows: install lane line striping where trench was installed east of the Intersection in eastbound direction, and install all striping in northbound and southbound direction north of the Intersection to the driveway entrance to Hitachi (2000 Sierra Point Parkway).

(d) Install double yellow centerline and median on Sierra Point Parkway from Highway 101 overpass eastbound to intersection with Highway 101 on/off ramps.

(e) Install warning sign for bump on Sierra Point Parkway eastbound at Highway 101 overpass.

(f) Install yield signs for all four (4) right turns at the Intersection.

(g) Provide crosswalk pavers at all locations within the Intersection cut by utility trenches and replaced with A.C. pavement.

(h) Install "cap seal" over work area before placing striping and markings.

Striping and pavement markings, as provided in this Section 2, shall be thermoplastic.

3. Completion Date. Subject to events of Force Majeure, the Interim Improvements shall be completed not later than one hundred eighty (180) days from the Effective Date.

4. Approvals. The Interim Improvements shall be performed in accordance with plans approved by the City prior to Developer's commencement of the Interim Improvements.

[Remainder of Page Left Blank Intentionally.]

5. Existing Agreement. Except as modified by this Amendment and as previously modified by the First Amendment and the Second Amendment, the Project Approval Agreement is declared to remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the Effective Date.

CITY OF BRISBANE

By: A. Sepi Richardson
A. Sepi Richardson, Mayor

ATTEST:
Sheri Marie Schroeder
Sheri Marie Schroeder, City Clerk

REDEVELOPMENT AGENCY
OF THE CITY OF BRISBANE

By: A. Sepi Richardson
A. Sepi Richardson, Agency Chair

ATTEST:
Sheri Marie Schroeder
Sheri Marie Schroeder, Agency Secretary

SIERRA POINT, LLC,
a Delaware limited liability company

By: L Campa
Name: Luz Campa
Its: Vice President

APPENDIX C

TRANSPORTATION IMPACT ANALYSIS

Appendix C-1

Traffic Impact Analysis

Sierra Point Biotech Development
Transportation Impact Analysis

Prepared for:

LSA Associates, Inc.

Prepared by:

Hexagon Transportation Consultants, Inc.

November 6, 2006

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Executive Summary

The purpose of this report is to analyze the transportation impacts of the proposed Sierra Point Biotech development located just east of Shoreline Court on Sierra Point Parkway in Brisbane, California. The project would consist of 540,185 s.f. of R&D, with a possible addition of 89,800 s.f. R&D, and 2,500 s.f. or retail use. The proposed project site is currently vacant. Access to the site is proposed via two driveways on Sierra Point Parkway and one driveway on Shoreline Court.

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Brisbane. The study included an analysis of AM and PM peak-hour traffic conditions for 6 signalized intersections, 4 unsignalized intersections, and 3 roadway segments in the vicinity of the project site.

Project Trip Generation and Distribution

The amount of traffic generated by the proposed project was estimated by applying the appropriate trip generation rates to the size of the development. The trip generation rates used were those published in the *ITE Trip Generation Manual, Seventh Edition, 2003* for R & D and retail uses. Based on these rates, the project is estimated to generate 784 AM peak-hour trips and 689 PM peak-hour trips. Using the inbound/outbound splits recommended by ITE, the project would produce 650 inbound and 134 outbound trips during the AM peak hour, and 105 inbound and 584 outbound trips during the PM peak hour. The proposed project's trip distribution pattern was estimated based on travel patterns suggested by the C/CAG travel demand forecasting model system (TDM 1101). The trips generated by the proposed project were then assigned to the roadway network based on this directional distribution during the peak hours of adjacent street traffic.

Intersection Impacts and Mitigation

Under project conditions, the results show that three of the study intersections would operate at an unacceptable LOS measured against the City of Brisbane level of service guidelines. The unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F during the AM peak hour. The unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F during the PM peak hour. The unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate

at LOS F during the PM peak hour. The remaining study intersections would operate at an acceptable LOS.

Based on the *Second Amendment to Agreement Concerning Project Approval Document,* November 17, 2003, the Developer and the City have agreed that the mitigation measures developed in the Fehr & Peers Associates, Inc. memorandum *Sierra Point Improvement Phasing Analysis,* shall be completed when traffic volumes reach the thresholds as shown in Table 10. The intersections of Sierra Point Parkway/Shoreline Court and Sierra Point Parkway/Lagoon Way would reach the established triggers during both the AM and PM peak hours. The intersection of Sierra Point Parkway/US 101 NB off-ramp would not reach the triggers during the AM or PM peak hours.

Significant Impact: During the AM peak hour, the unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS C under background conditions. Under project conditions it would operate at LOS F. According to the City of Brisbane guidelines, this would constitute a significant impact.

> **Mitigation:** To mitigate this impact, the intersection of Sierra Point Parkway/US 101 NB Ramp would need to be signalized. This mitigation measure would allow the intersection to operate at LOS C during the AM peak hour and LOS A during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS C under background conditions. Under project conditions it would operate at LOS F. According to the City of Brisbane guidelines, this would constitute a significant impact. In addition, the intersection also would reach the traffic volume thresholds established in the *Second Amendment to Agreement Concerning Project Approval Document* during both the AM and PM peak hours.

> **Mitigation:** Based on the *Second Amendment to Agreement Concerning Project Approval Document* and the agreed upon mitigation in the *Sierra Point Improvement Phasing Analysis*, the intersection of Sierra Point Parkway/Lagoon Way would need to be signalized and a second northbound through lane should be added. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS B during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS C under background conditions. Under project conditions it would operate at LOS F. According to the City of Brisbane guidelines, this would constitute a significant impact. In addition, the intersection also would reach the traffic volume thresholds established in the *Second Amendment to Agreement Concerning Project Approval Document* during both the AM and PM peak hours.

> **Mitigation:** To mitigate this impact, the intersection of Sierra Point Parkway/Shoreline Court would need to be signalized and the addition of a second northbound left-turn lane, a second southbound right-turn lane, and a second eastbound left-turn lane would be required. It appears that the *Phase I – Interim Improvement* of an eastbound right-turn lane has already been constructed and would not need to be part of this mitigation. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS C during the PM peak hour.

Freeway Impacts

The results of the CMP freeway level of service analysis show that none of the freeway segments analyzed would be impacted by the project according to the San Mateo County CMP level of service standards for freeways.

Impacts to Alternative Modes

The proposed project's impacts to existing bicycle, transit, and pedestrian facilities also were evaluated as part of this study. Although the development would slightly increase the demand for these modes, it would not result in any adverse significant impacts.

Year 2030 Project Traffic Impacts

Under year 2030 (cumulative) conditions, the results show that four of the study intersections would operate at an unacceptable LOS measured against the City of Brisbane level of service guidelines. The unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F during the AM peak hour. The unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F during the PM peak hour. The unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F during the PM peak hour. Without the project, the signalized intersection of Bayshore Boulevard/Old County Road would operate at LOS D during the AM peak hour and LOS C during the PM peak hour. Under cumulative conditions with the project it would operate at LOS D during the AM peak hour, with an increase in the average delay of more than 4 seconds. During the PM peak hour, the intersection would operate at a LOS D. The remaining study intersections would operate at an acceptable LOS.

Significant Impact: During the AM peak hour, the unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F under cumulative conditions (year 2030) without the project. Under cumulative conditions with the project it would operate at LOS F, with an increase in the average delay of more than 4 seconds. According to the City of Brisbane guidelines, this would constitute a significant impact.

> **Mitigation:** To mitigate this impact, the intersection of Sierra Point Parkway/US 101 NB Ramp would need to be signalized. This mitigation measure would allow the intersection to operate at LOS F during the AM peak hour, with a decrease in the average delay compared to the cumulative condition without the project, and LOS C during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F under cumulative conditions (year 2030) without the project. Under cumulative conditions with the project it would operate at LOS F, with an increase in the average delay of more than 4 seconds. According to the City of Brisbane guidelines, this would constitute a significant impact.

> **Mitigation:** Using the mitigation applied under Project Conditions, the intersection of Sierra Point Parkway/Lagoon Way would need to be signalized and a second northbound through lane should be added. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS B during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F under cumulative conditions (year 2030) without the project. Under cumulative conditions with the project it would operate at LOS F, with an increase in the average delay of more than 4 seconds. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation: Using the mitigation applied under Project Conditions, the intersection of Sierra Point Parkway/US 101 NB Ramp would need to be signalized and the addition of a second northbound left-turn lane, a second southbound right-turn lane, and a second eastbound left-turn lane would be required. It appears that the *Phase I – Interim Improvement* of an eastbound right-turn lane has already been constructed and would not need to be part of this mitigation.. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS C during the PM peak hour.

Significant Impact: Under cumulative conditions (year 2030) without the project, the signalized intersection of Bayshore Boulevard/Old County Road would operate at LOS D during the AM peak hour and LOS C during the PM peak hour. Under cumulative conditions with the project it would operate at LOS D during the AM peak hour, with an increase in the average delay of more than 4 seconds. During the PM peak hour, the intersection would operate at a LOS D. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation 1: A possible mitigation at the intersection of Bayshore Boulevard/Old County Road would be to add a second eastbound left-turn lane and convert the existing shared-through-left to a through lane. This would change the existing eastbound geometry from one left-turn, one shared-through-left, and one right-turn to two left-turns, one through lane, and one right-turn lane. This mitigation measure would allow the intersection to operate at LOS C during both the AM and PM peak hours. This may require the need for additional right-of-way to be obtained from the nearby property owners.

Mitigation 2: Another possible mitigation at the intersection of Bayshore Boulevard/Old County Road would be to add a westbound through lane. This would change the existing westbound geometry from one shared-through-left and one right-turn to one shared-through-left, one through lane, and one right-turn lane. This mitigation measure would allow the intersection to operate at LOS C during both the AM and PM peak hours. This may require the need for additional right-of-way to be obtained from the nearby property owners.

Mitigation 3: One final possible mitigation measure would be to adjust the signal timing of the intersection which could improve the LOS to an acceptable level.

Cumulative Freeway Impacts and Mitigations

Cumulative traffic would constitute one percent or more of freeway capacity on three of the eight LOS F directional freeway segments studied. Therefore, based on the CMP criteria for significant impacts on freeways, the project would contribute to cumulatively significant impacts on freeways.

Significant Impact: The project would contribute to cumulatively significant freeway level of service impacts on the following three directional freeway segments:

US 101 southbound between Harney Wy and Sierra Point Pkwy - AM
US 101 southbound between Sierra Point Pkwy and Oyster Point Blvd - PM
US 101 northbound between Oyster Point Blvd and Sierra Point Pkwy – AM

The remaining study directional freeway segments would operate at an acceptable LOS E or better.

Mitigation 1: In accordance with CMP requirements, the project may be required to implement Travel Demand Management (TDM) measures to the extent that the measures will "mitigate" the project impacts. These measures are provided in the San Mateo County *Final Congestion Management Program* and are ultimately decided by the project applicant and the City. However, mitigation measures, involving implementation of TDM measures, are typically designed to achieve a 10-20% traffic reduction. Even with these reductions the freeway segments could continue to operate above the CMP threshold for significant impacts. Some of the measures that could be implemented are shown below:

- Provide for increased frequencies of existing dedicated shuttle service during the peak period to a rail station or residential area; coordinate with Caltrain shuttle services with respect to locations of stops and related amenities.
- Provide secure bicycle parking
- Operation of a commute assistance center, offering on site, one stop shopping for transit and commute alternatives information, preferably staffed with a live person to assist building tenants with trip planning.
- Flextime: Implementation of an alternate hours workweek program.

Mitigation 2: The mitigation necessary to reduce significant impacts on freeways is the widening of the freeway. Due to the substantial cost, this measure is not considered feasible for a single development project.

Therefore, the freeway segment impacts are considered significant and unavoidable.

Table ES-1
Levels of Service

Intersection	Peak Hour	Count Date	Existing Ave. Delay	Existing LOS	Background Ave. Delay	Background LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Conditions Incr. In Crit Delay	Project Conditions Incr. In Crit V/C	Cumulative Ave. Delay	Cumulative LOS	Cumulative + Proj Ave. Delay	Cumulative + Proj LOS
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	6/7/2006	28.9	C	32.4	C	33.6	C	0.8	0.008	133.6	F	127.7	F
	PM	6/7/2006	22.5	C	31.0	C	31.3	C	0.6	0.006	21.4	C	21.3	C
2. Alemany Blvd and Congdon St	AM	6/8/2006	14.1	B	14.1	B	14.1	B	0.0	0.004	11.9	B	10.5	B
	PM	6/8/2006	14.9	B	14.9	B	14.9	B	0.0	0.002	10.7	B	10.6	B
3. Alemany Blvd and Geneva Ave	AM	6/7/2006	36.0	D	36.0	D	36.0	D	0.1	0.001	215.6	F	217.4	F
	PM	6/7/2006	33.4	C	33.4	C	33.4	C	0.1	0.006	65.3	E	67.4	E
4. Mission St and Geneva Ave	AM	6/6/2006	10.3	B	10.3	B	10.3	B	0.0	0.002	190.4	F	191.7	F
	PM	6/6/2006	10.9	B	10.9	B	10.9	B	0.0	0.008	70.5	E	72.5	E
5. Bayshore Blvd and Geneva Ave	AM	5/25/2006	16.8	B	16.4	B	16.4	B	0.1	0.004	295.3	F	295.5	F
	PM	5/25/2006	17.3	B	18.2	B	18.3	B	0.0	0.017	72.0	E	75.4	E
6. Bayshore Blvd and Old County Road*	AM	5/25/2006	21.6	C	20.4	C	21.5	C	0.2	0.005	36.9	D	42	D
	PM	5/25/2006	22.1	C	22.1	C	22.7	C	0.6	0.013	34.8	C	36.5	D
7. Tunnel Ave and Lagoon Wy	AM	5/25/2006	8.9	A	8.9	A	9.7	A	0.8	0.092	20.6	C	25.5	D
	PM	5/25/2006	9.1	A	9.2	A	10.1	B	0.8	0.067	27.5	D	33.4	D
8. Sierra Point Pkwy and Lagoon Wy	AM	6/6/2006	9.9	A	9.9	A	29.0	D	19.1	0.526	14.4	B	16.5	C
	PM	6/6/2006	16.9	C	16.9	C	55.4	F	38.5	0.336	83.9	F	220.7	F
9. Sierra Point Pkwy and US 101 NB Ramps	AM	6/8/2006	17.9	C	17.9	C	315.9	F	-	-	153.7	F	620.0	F
	PM	6/8/2006	9.6	A	9.9	A	11.4	B	-	-	13.2	B	18.5	C
10. Sierra Point Pkwy and Shoreline Ct	AM	6/6/2006	10.4	B	10.4	B	14.7	B	4.3	0.195	8.8	A	10.6	B
	PM	6/6/2006	18.4	C	18.4	C	68.5	F	50.2	0.441	86.1	F	319.8	F

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

1. Introduction

The purpose of this report is to analyze the transportation impacts of the proposed Sierra Point Biotech development located just east of Shoreline Court on Sierra Point Parkway in Brisbane, California. The project would consist of 540,185 s.f. of R&D, with a possible addition of 89,800 s.f. R&D, and 2,500 s.f. or retail use. The proposed project site is currently vacant. Access to the site is proposed via two driveways on Sierra Point Parkway and one driveway on Shoreline Court. The project location is shown graphically on Figure 1. The proposed site plan is shown in Figure 2.

Scope of Work

The purpose of the traffic analysis is to satisfy the traffic study requirements of the City of Brisbane and to assess the effects of the potential Sierra Point Biotech development on transportation and circulation. The study will determine the traffic impacts on the key intersections and roadway segments in the study area. The key intersections are:

Bayshore Boulevard and Sister Cities/Oyster Point Boulevard
Alemany Boulevard and Congdon Street
Alemany Boulevard and Geneva Avenue
Mission Street and Geneva Avenue
Bayshore Boulevard and Geneva Avenue
Bayshore Boulevard and Old County Road
Tunnel Avenue and Lagoon Way
Sierra Point Parkway and Lagoon Way
Sierra Point Parkway and US 101 Northbound Ramps
Sierra Point Parkway and Shoreline Court

The key roadway segments are:

US 101 between Oyster Point Boulevard and Sierra Point Parkway
US 101 between Sierra Point Parkway and Harney Way
I-280 between Alemany Boulevard and San Jose Avenue

Figure 1
Site Location

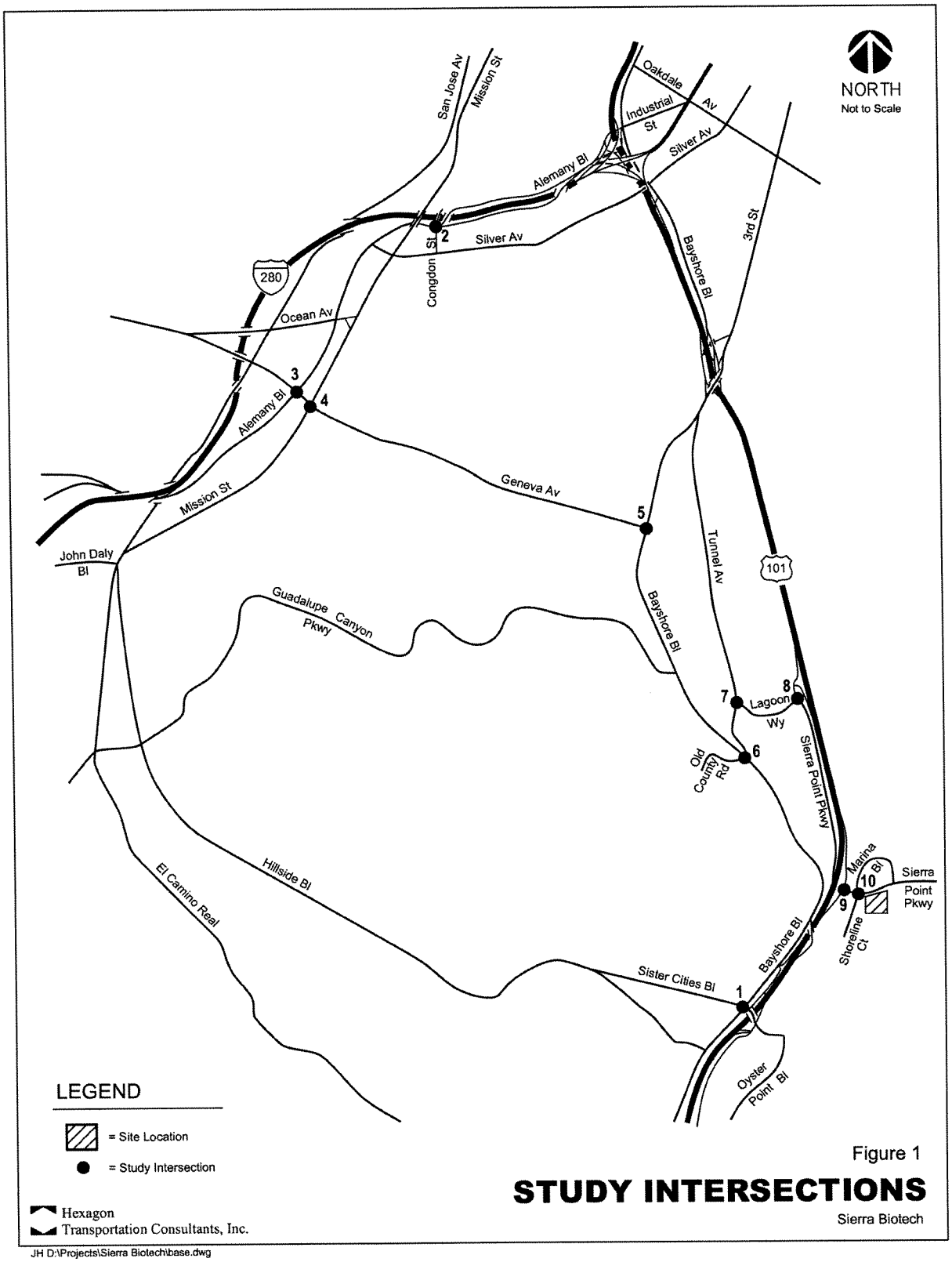
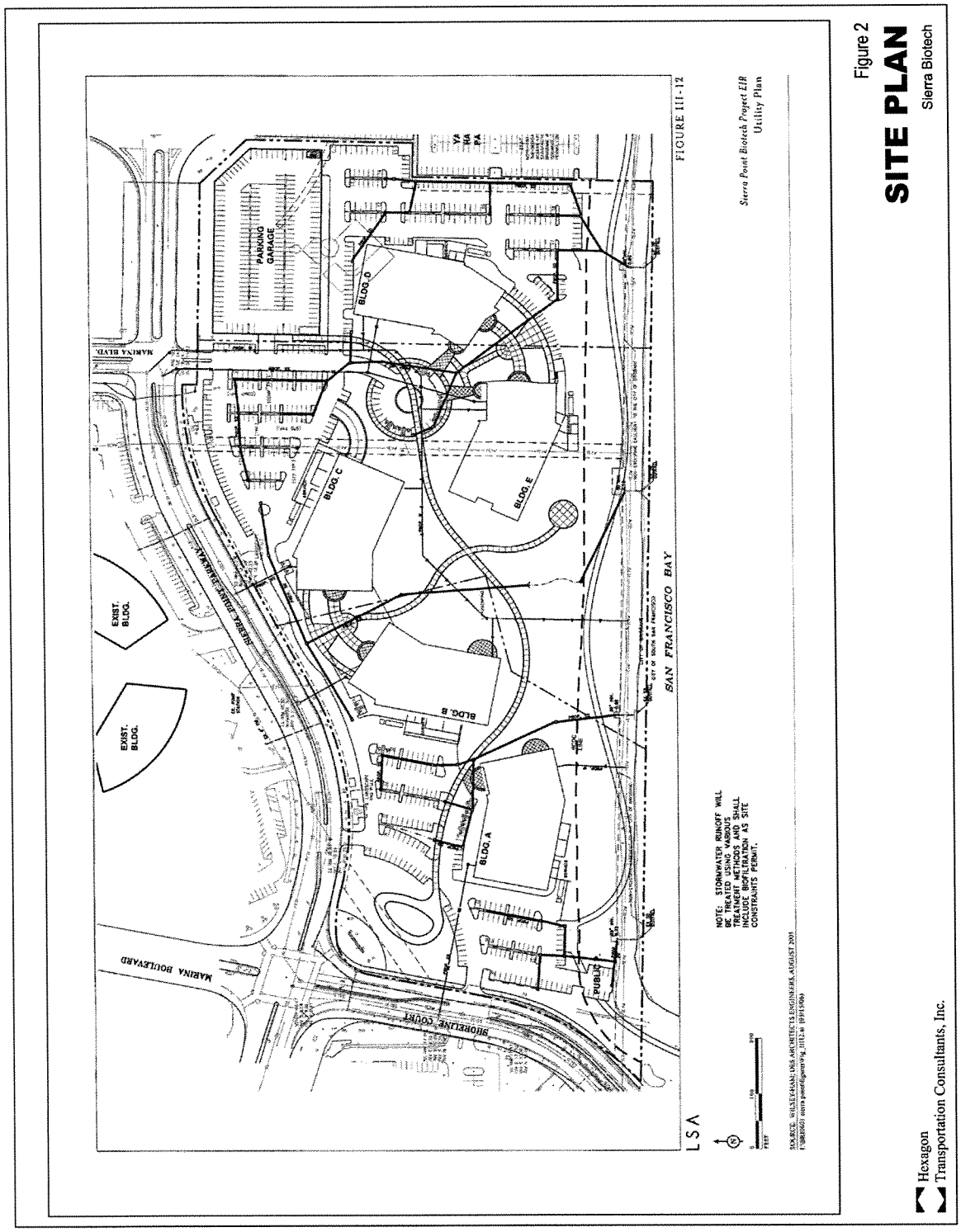


Figure 2
Site Plan



These intersections were selected based on discussions with City of Brisbane staff. The intersections were analyzed during the weekday AM and PM peak hours of traffic (commonly referred to as the commute hours), which occur from 6:00 - 9:00 AM, and 4:00 - 7:00 PM. These periods represent the most congested traffic conditions of an average weekday.

The operations of the key intersections were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* The existing operations of the key intersections and roadway segments will be evaluated using current AM and PM peak-hour counts. The intersection analyses will be conducted using the TRAFFIX software based on the methodology described in the 2000 Highway Capacity Manual. Key roadway segments will be evaluated using the Highway Capacity Software (HCS) 2000.

Scenario 2: *Background Conditions.* Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The latter component was obtained from previous traffic reports provided by the City of Brisbane, City of San Francisco, and City of South San Francisco.

Scenario 3: *Project Conditions.* Future traffic volumes with the project (hereafter called *project traffic volumes*) were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Scenario 4: *Cumulative Conditions.* Long-term (2030) conditions with and without the potential future developments in the Slough Estates area will be evaluated to identify whether the project contributes incrementally to a cumulative impact. Cumulative background traffic volumes will be estimated by applying the current version of the C/CAG travel demand forecasting model with and without the project.

Methods

This section describes the methods used to determine the traffic operations for each scenario. It includes the methods used for data collection, level of service calculations, and describes the various level of service standards, as well as the criteria for project impacts.

Data Collection

The data required for the analysis were obtained from field observations, new traffic counts, previous traffic studies, the City of Brisbane, the City of San Francisco, and the City of South San Francisco. The following data were collected from these sources:

- existing traffic volumes,
- lane geometries,
- approved trips inventory for Brisbane, San Francisco, and South San Francisco
- signal timing and phasing (for signalized intersections only).

Level of Service Methods

The previously-described data were then used to calculate each study location's level of service (LOS). Level of service is a qualitative measure of traffic operations, ranging from LOS A (free-flow condition) to LOS F (forced-flow conditions).

The County of San Mateo monitors congestion on the freeways and other regional facilities that are part of the Congestion Management Roadway Network. Traffic impact analyses must include an analysis of the Congestion Management Program (CMP) roadway facilities in order to determine if the project creates any traffic impacts on the CMP system. The analysis is based on C/CAG's most recent policy standards adopted 8/10/06.

Intersections

The City of Brisbane level of service methodologies utilize TRAFFIX software using CMP default settings. TRAFFIX is based on the *2000 Highway Capacity Manual* (HCM) method for intersections, and evaluates intersection operations on the basis of average delay for all vehicles at the intersection. This average delay can then be correlated to a level of service for signalized intersections as shown in Table 1. The correlation of level of service and average delay for unsignalized intersections is shown in Table 2. For two way stop controlled intersections, the level of service reported is for the worst approach of the intersection.

In addition to the level of service evaluation, for unsignalized intersections an assessment is made of the need for signalization of the intersection. This assessment is made on the basis of the Peak-hour Volume Signal Warrant, Warrant #11 described in the Caltrans *Traffic Manual*. The peak-hour volume signal warrant method makes no evaluation of intersection level of service, but simply provides an indication of whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Freeway Segments

As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on volume-to-capacity ratios. Volume-to-capacity ratios are calculated by the following formula:

$$R = V / (C * N)$$

where:

R= volume-to-capacity ratio
V= peak hour volume, in vehicles per hour (vph)
C= capacity in vehicles per lane per hour (vplph)
N= number of travel lanes

The volume-to-capacity ratio on a segment is correlated to level of service as shown in Table 3. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from HOV (carpool) lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments six lanes or wider in both directions and a capacity of 2,200 vphpl be used for segments four lanes wide in both directions. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

Table 1
Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Control Delay Per Vehicle (seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *Highway Capacity Manual 2000,* Exhibit 16-2.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Stopped Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression .	10.0 or less
B	Operations with low delay occurring with good progression.	10.1 to 15.0
C	Operations with average delays resulting from fair progression.	15.1 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression or high V/C ratios.	25.1 to 35.0
E	Operations with high delay values indicating poor progression and high V/C ratios. This is considered to be the limit of acceptable delay.	35.1 to 50.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation and poor progression.	Greater than 50.0

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

Table 3
Freeway Segment LOS Definitions Based on Volume-to-Capacity Ratios

Level of Service	Volume-to-Capacity Ratio
A	<0.6
B	0.6 – 0.69
C	0.7 – 0.79
D	0.8 – 0.89
E	0.9 – 0.99
F	1.0 or greater

Report Organization

The remainder of this report is divided into six chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the intersection operations under background conditions. Chapter 4 describes the method used to estimate project traffic, its impact on the transportation system, and the recommended mitigation measures. Chapter 5 discusses the traffic conditions under 2030 conditions.

2.
Existing Conditions

This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network facilities and operations, transit service, and bicycle and pedestrian access.

Roadway Network

Regional access to the project site is provided via US 101 and I-280. Direct access to the site is provided via Sierra Point Parkway and Shoreline Court. Other major facilities in the vicinity include Bayshore Boulevard and Tunnel Avenue. These facilities are described below.

US 101 is a north/south freeway that provides regional access between San Francisco and points north (the North Bay and the Golden Gate Bridge) and points south (the Peninsula and South Bay). US 101 connects with Highway 1 north of San Francisco, and connects with I-80 near the Bay Bridge. US 101 has a northbound on/off ramp in the immediate vicinity of the proposed project site. In addition, southbound on/off ramps are located at Sierra Point Parkway and Lagoon Way.

I-280 provides regional access between San Francisco, the Peninsula, and the South Bay. The freeway provides a direct connection to US 101 and terminates at surface streets in the South of Market/Mission Bay area. South of the interchange with US 101, I-280 is a six to eight-lane freeway. Access between I-280 and the proposed project site is provided via US 101.

Sierra Point Parkway is primarily a north/south roadway that extends from Lagoon Way in the north to its termination east of the project site. In the vicinity of the project Sierra Point Parkway is a four-lane roadway that runs in an east/west direction and provides direct access to the proposed project site.

Shoreline Court is a four-lane, north/south roadway that extends from its intersection with Sierra Point Parkway in the north to its terminus approximately ¼ mile south. Shoreline Court provides direct access to the proposed project site.

Bayshore Boulevard is a north/south arterial that generally parallels US 101, extending from Airport Boulevard in South San Francisco, through the City of Brisbane, and into San Francisco where it becomes 3rd Street. In the vicinity of the project, Bayshore Boulevard has two travel lanes in each direction.

Tunnel Avenue is a two-lane, north/south roadway that extends from Bayshore Boulevard near Hester Avenue in the north to Bayshore Boulevard in the south where it becomes Old County Road.

Pedestrian and Bicycle Facilities

Existing bicycle access to the proposed site is provided by a series of bike routes on Sierra Point Parkway, Bayshore Boulevard, Tunnel Avenue, and Lagoon Way. Figure 3 shows the existing bikeways. Sidewalks are found along Sierra Point Parkway and Marina Boulevard in the vicinity of the site.

Transit Service

Existing bus service on the surrounding roadway network is provided by the San Mateo County Transit District (Samtrans) and Caltrain. Route 292 and Route 397 both of which provide service between San Mateo and downtown San Francisco, are located closest to the proposed project site. Routes FX, KX, MX, NX, PX, and RX are express routes that provide service along US 101 near the project site. However, Caltrain operates a shuttle service from its South San Francisco station to the Sierra Point area office buildings during the commute hours. Table 4 summarizes the service frequencies for these routes. Figure 4 shows the existing transit service.

Table 4
VTA Transit Service

Line	Route Description	Weekday Hour of Operation	Headway*
Samtrans			
Route 292	Hillsdale Shopping Center and Downtwon San Francisco	4:45 AM to 2:00 AM	20 to 40 minutes
Route 397	Eastridge Transit Center to Great Mall/Milpitas	12:45 PM to 5:45 PM	60 minute
Caltrain			
Shuttle	Great Mall/Main Transit Ctr to Lockheed Martin	6:30 AM to 6:00PM	15 to 45 minutes

* Headways during commute periods

Figure 3
Existing Bikeways Map

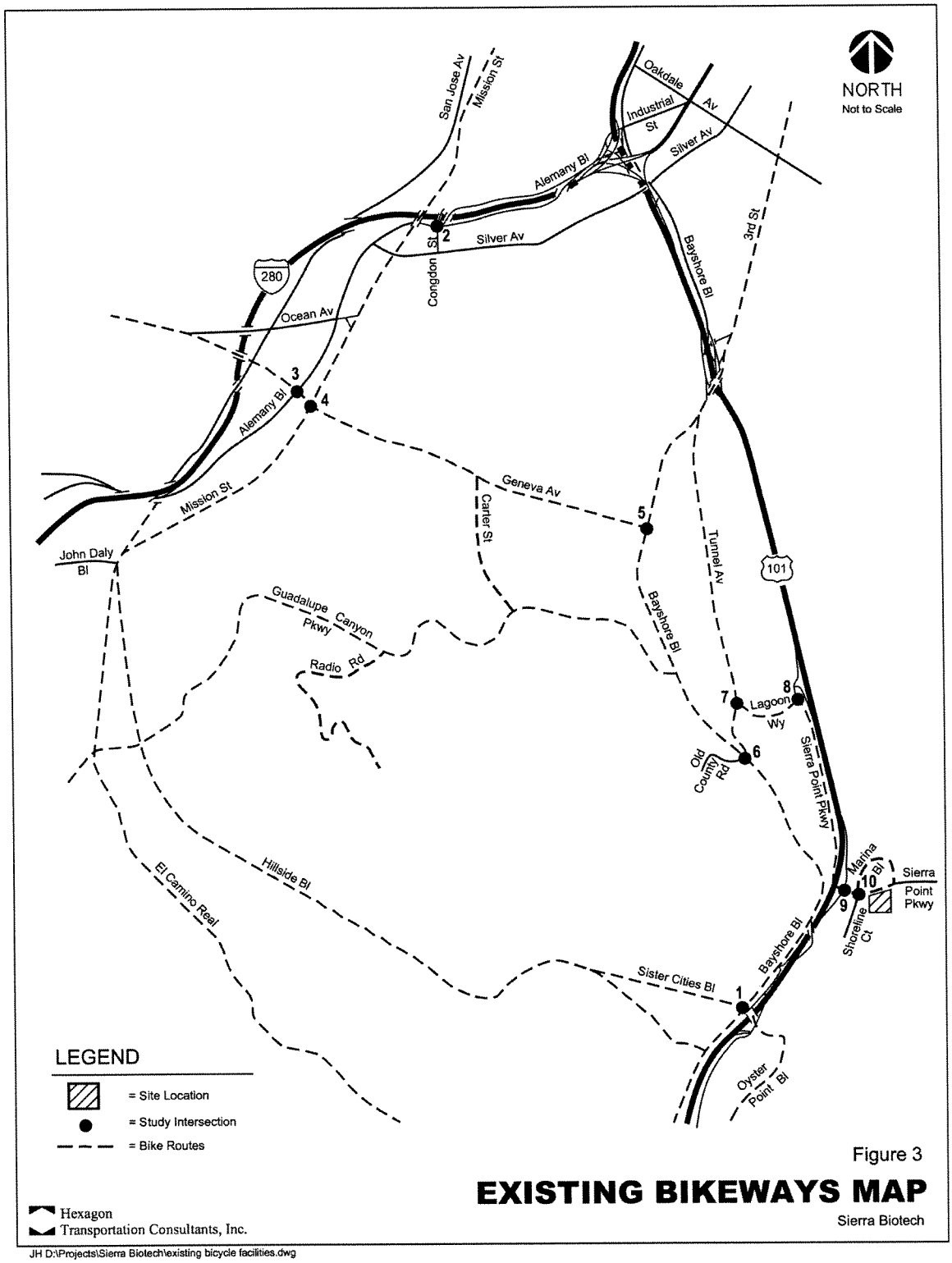
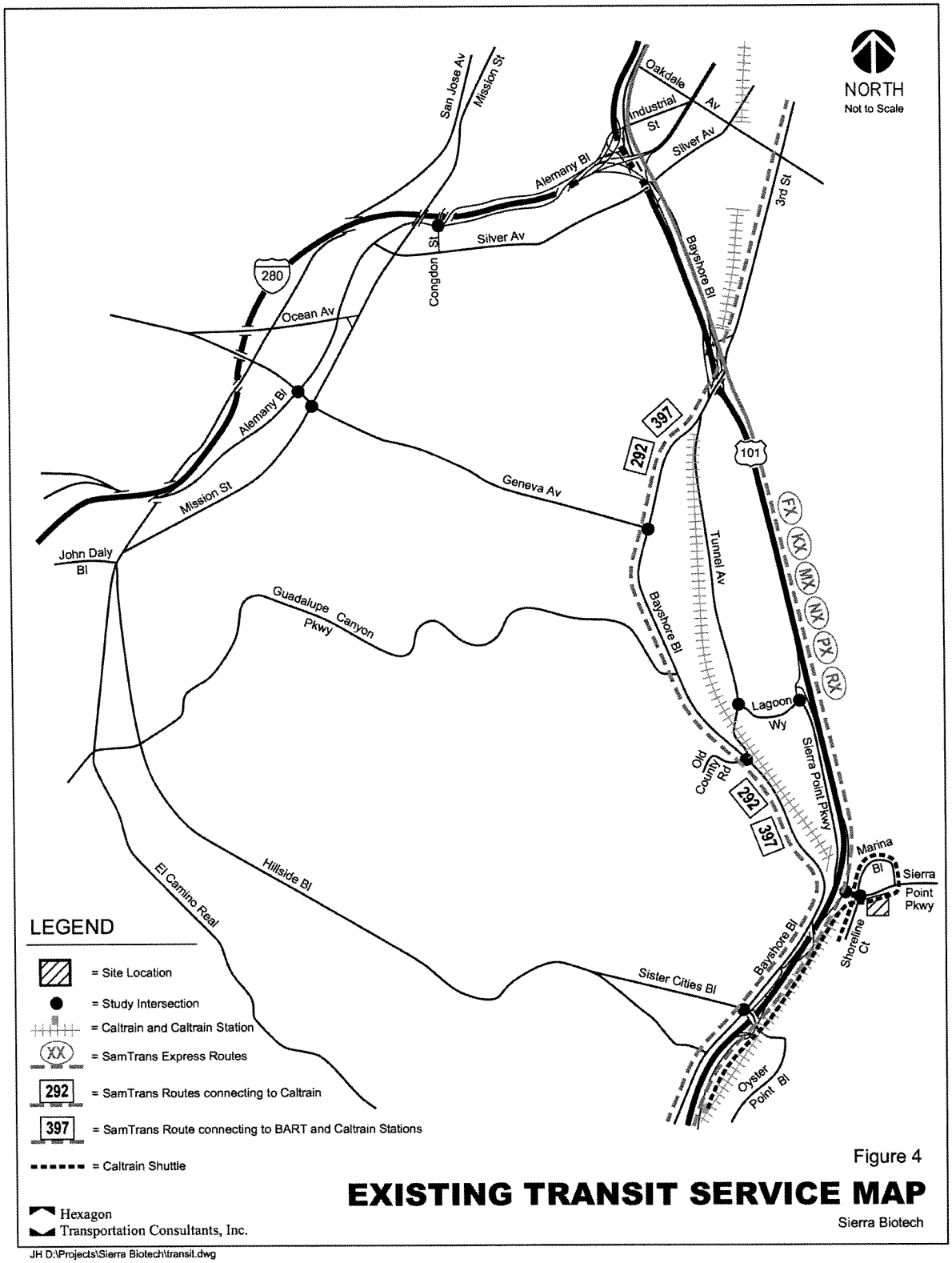


Figure 4
Existing Transit Service Map



Existing Intersection Operations

Existing AM and PM peak-hour traffic volumes for the 10 study intersections were obtained from new manual turning-movement counts at the study intersections. The traffic count data are included in Appendix A.

The operations of the study intersections were evaluated using TRAFFIX software to determine their levels of service. The lane configurations used for the calculations are shown in Figure 5. The intersection turn movement volumes are shown in Figure 6. Table 5 presents the results of the intersection level of service calculations. The TRAFFIX calculation sheets are included in Appendix B. According to the LOS standards discussed in Chapter 1, all of the study intersections currently operate at acceptable levels of service during the AM and PM peak hours.

Existing Signal Warrants

The peak-hour signal warrant (*Caltrans Traffic Manual*, Chapter 9, Warrant 11) was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of existing peak-hour volumes. The analysis showed that none of the study intersections would meet the signal warrant under existing conditions. The signal warrant analysis sheets are included in Appendix E.

Existing Freeway Levels of Service

Traffic volumes for the subject freeway segments were obtained from Caltrans. The data provided by Caltrans consisted of a nearby count station on the actual freeway main line and a series of ramp counts at the interchanges between the count station and the study limits. These data were used to derive the counts for the segments that were studied.

The results of the analysis are summarized in Table 6. All of the analyzed freeway segments operate at LOS E or better during the AM and PM peak hours.

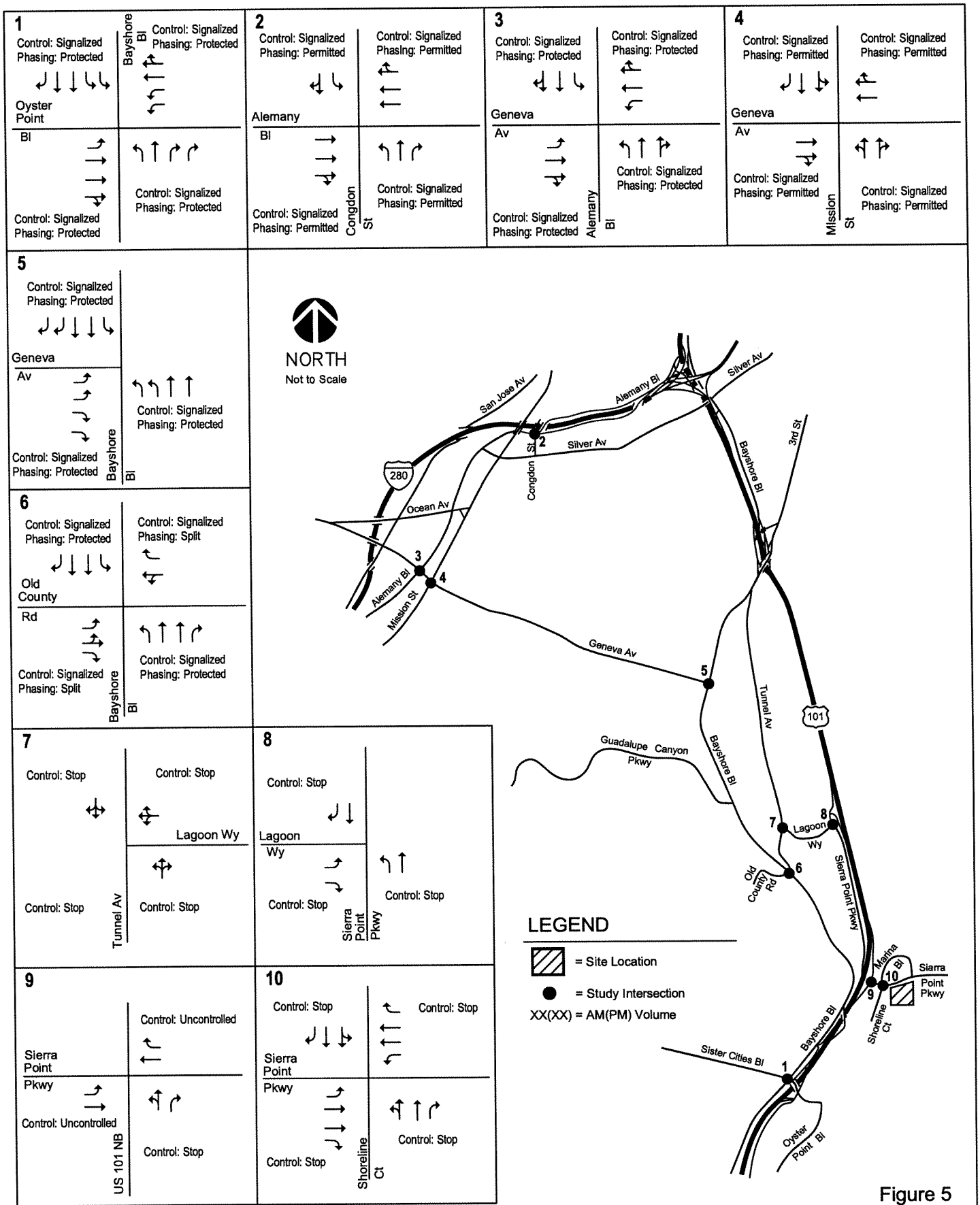


Figure 5

EXISTING LANE CONFIGURATIONS

Sierra Biotech

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Transportation Consultants, Inc.

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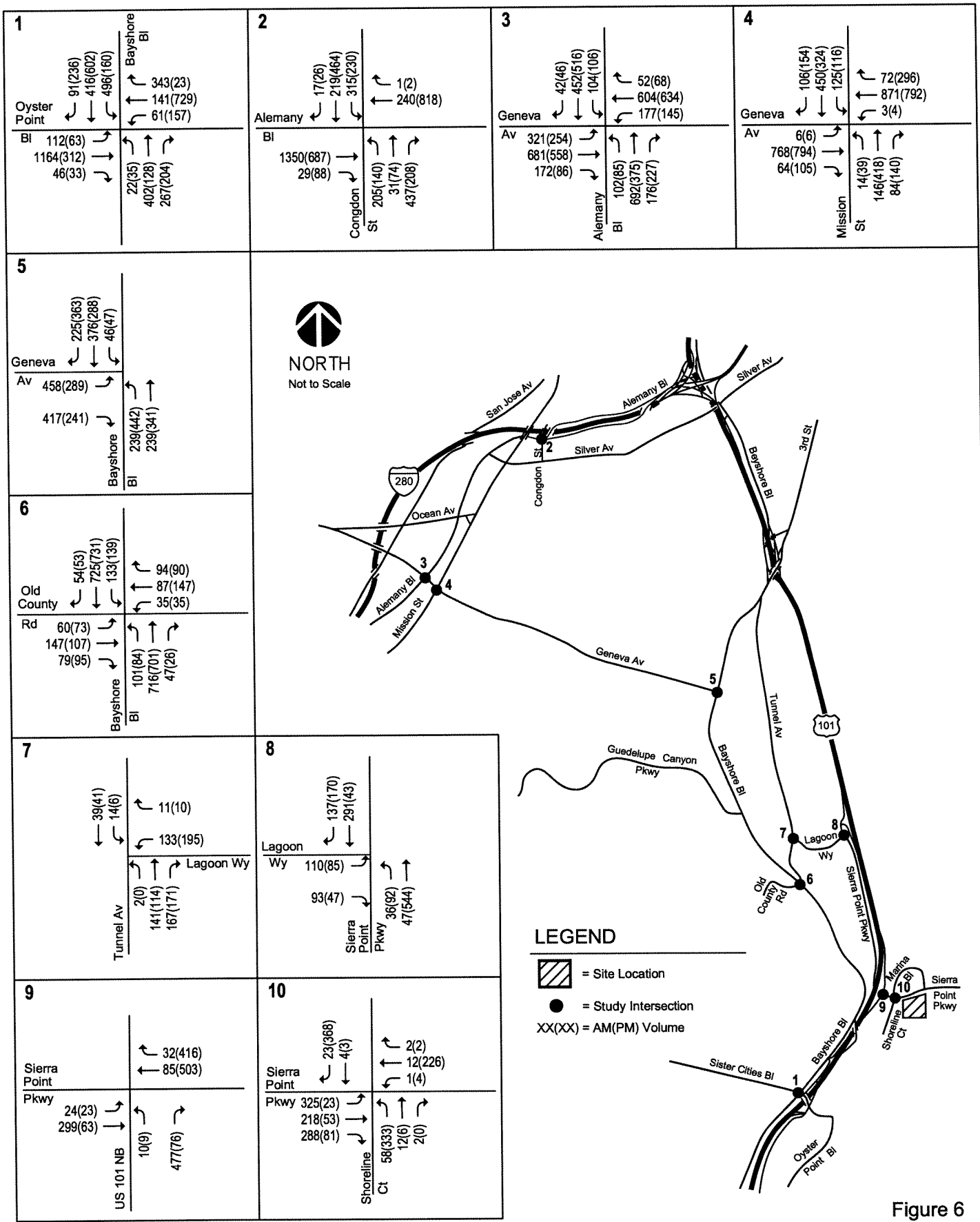

Figure 6

EXISTING PEAK HOUR TRAFFIC VOLUMES

Sierra Biotech

Hexagon
Transportation Consultants, Inc.

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Table 5
Existing Intersection Levels of Service

Intersection	Peak Hour	Count Date	Existing Ave. Delay	Existing LOS
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	6/7/2006	28.9	C
	PM	6/7/2006	22.5	C
2. Alemany Blvd and Congdon St	AM	6/8/2006	14.1	B
	PM	6/8/2006	14.9	B
3. Alemany Blvd and Geneva Ave	AM	6/7/2006	36.0	D
	PM	6/7/2006	33.4	C
4. Mission St and Geneva Ave	AM	6/6/2006	10.3	B
	PM	6/6/2006	10.9	B
5. Bayshore Blvd and Geneva Ave	AM	5/25/2006	16.8	B
	PM	5/25/2006	17.3	B
6. Bayshore Blvd and Old County Road*	AM	5/25/2006	21.6	C
	PM	5/25/2006	22.1	C
7. Tunnel Ave and Lagoon Wy	AM	5/25/2006	8.9	A
	PM	5/25/2006	9.1	A
8. Sierra Point Pkwy and Lagoon Wy	AM	6/6/2006	9.9	A
	PM	6/6/2006	16.9	C
9. Sierra Point Pkwy and US 101 NB Ramps	AM	6/8/2006	17.9	C
	PM	6/8/2006	9.6	A
10. Sierra Point Pkwy and Shoreline Ct	AM	6/6/2006	10.4	B
	PM	6/6/2006	18.4	C

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

Table 6
Existing Freeway Levels of Service

Freeway	Segment	Direction	Peak Hour	Ave. Speed/a/	Mixed-Flow Lanes # of Lanes	Volume/a/	V/C	LOS
US 101	Harney Wy to Sierra Point Pkwy	SB	AM	65	4	8,656	0.94	E
			PM		4	7,775	0.85	D
US 101	Sierra Point Pkwy to Oyster Point Blvd	SB	AM	65	4	7,355	0.80	D
			PM		4	7,413	0.81	D
I - 280	Alemany Blvd to San Jose Ave	SB	AM	65	4	5,458	0.59	A
			PM		4	8,651	0.94	E
US 101	Oyster Point Blvd to Sierra Point Pkwy	NB	AM	65	4	7,484	0.81	D
			PM		4	8,412	0.91	E
US 101	Sierra Point Pkwy to Harney Wy	NB	AM	65	4	7,167	0.78	C
			PM		4	7,593	0.83	D
US 101	San Jose Ave to Alemany Blvd	NB	AM	65	4	7,666	0.83	D
			PM		4	5,688	0.62	B

/a/ Source: Caltrans freeway count data.

3.
Background Conditions

This chapter describes background traffic conditions. Background conditions are defined as conditions just prior to completion of the proposed development. Traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site. Traffic volume and roadway network assumptions are described below.

Roadway Network

It is assumed in this analysis that the future near-term roadway network under background conditions would be the same as the existing roadway network. Bicycle, transit, and pedestrian facilities under background conditions were assumed to remain unchanged from existing conditions.

Background Traffic Volumes

Background peak-hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The added traffic from approved but not yet constructed developments was supplied by the City of Brisbane, the City of San Francisco, and the City of South San Francisco and can be found in Appendix C. Background traffic volumes are shown on Figure 7.

Approved Developments

Following are the approved developments that would produce trips in the study area:

- One Quarry Road - Brisbane
- 2011 Bayshore – San Francisco
- Executive Park – San Francisco
- Home Depot – South San Francisco
- Lowes – South San Francisco
- 249 East Grand – South San Francisco
- Genentech – South San Francisco
- Brittania East Grand – South San Francisco
- Terrabay – South San Francisco

Intersection Operations

Intersection level of service calculations were conducted to evaluate the operating levels of the key intersections under background conditions. The results are shown on Table 7. The TRAFFIX calculation sheets are included in Appendix B. According to City of Brisbane guidelines all of the study intersections are projected to operate at acceptable levels during the AM and PM peak hours.

Background Signal Warrants

The peak-hour signal warrant (Caltrans Traffic Manual, Chapter 9, Warrant 11) was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of background peak-hour volumes. The analysis showed that the peak-hour volume signal warrant is not satisfied under background conditions at the intersections. The signal warrant analysis sheets are included in Appendix E.

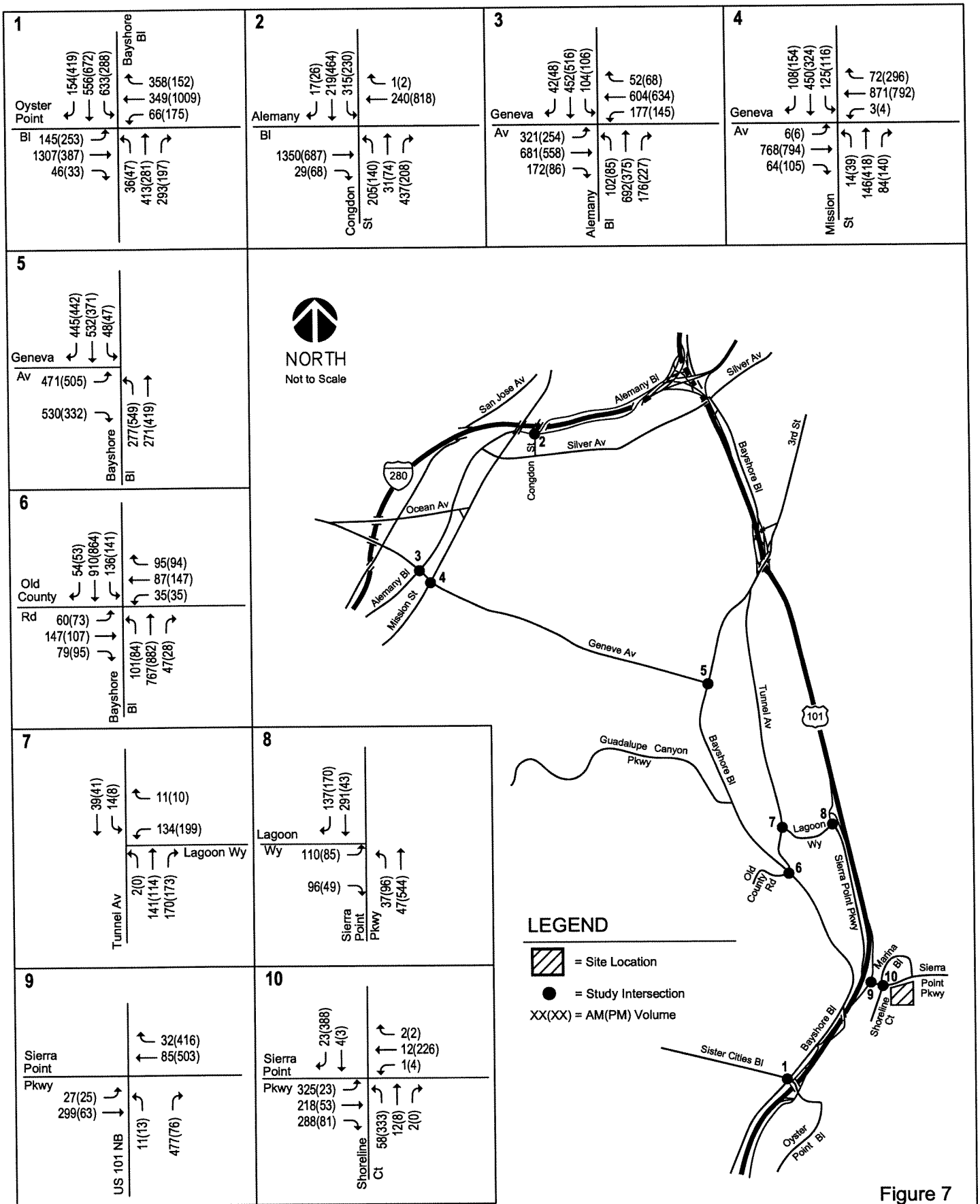

Figure 7

BACKGROUND PEAK HOUR TRAFFIC VOLUMES

Sierra Biotech

Hexagon Transportation Consultants, Inc.

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Table 7
Background Intersection Levels of Service

Intersection	Peak Hour	Count Date	Existing Ave. Delay	Existing LOS	Background Ave. Delay	Background LOS
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	6/7/2006	28.9	C	32.4	C
	PM	6/7/2006	22.5	C	31.0	C
2. Alemany Blvd and Congdon St	AM	6/8/2006	14.1	B	14.1	B
	PM	6/8/2006	14.9	B	14.9	B
3. Alemany Blvd and Geneva Ave	AM	6/7/2006	36.0	D	36.0	D
	PM	6/7/2006	33.4	C	33.4	C
4. Mission St and Geneva Ave	AM	6/6/2006	10.3	B	10.3	B
	PM	6/6/2006	10.9	B	10.9	B
5. Bayshore Blvd and Geneva Ave	AM	5/25/2006	16.8	B	16.4	B
	PM	5/25/2006	17.3	B	18.2	B
6. Bayshore Blvd and Old County Road*	AM	5/25/2006	21.6	C	20.4	C
	PM	5/25/2006	22.1	C	22.1	C
7. Tunnel Ave and Lagoon Wy	AM	5/25/2006	8.9	A	8.9	A
	PM	5/25/2006	9.1	A	9.2	A
8. Sierra Point Pkwy and Lagoon Wy	AM	6/6/2006	9.9	A	9.9	A
	PM	6/6/2006	16.9	C	16.9	C
9. Sierra Point Pkwy and US 101 NB Ramps	AM	6/8/2006	17.9	C	17.9	C
	PM	6/8/2006	9.6	A	9.9	A
10. Sierra Point Pkwy and Shoreline Ct	AM	6/6/2006	10.4	B	10.4	B
	PM	6/6/2006	18.4	C	18.4	C

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

4.
Project Impacts and Recommendations

This chapter describes project traffic conditions, significant project impacts, and measures that are recommended to mitigate project impacts. Included are descriptions of the significance criteria that define an impact, estimates of project-generated traffic, identification of the impacts, and descriptions of the mitigation measures. Project conditions are represented by background traffic conditions with the addition of traffic generated by the project.

Project Impact Criteria

According to the City of Brisbane project impacts at signalized and unsignalized intersections occur when:

1. The level of service at an intersection drops below its LOS standard (LOS C on Bayshore Blvd/Old County Rd and Bayshore Blvd/San Bruno Ave intersections, and LOS D at all other intersections) when project traffic is added; or

2. An intersection that is operating worse than its level of service standard under background conditions has an increase in critical delay of four or more seconds **AND** the demand-to-capacity ratio (V/C) is increased by more than .01 when project traffic is added.

The exception to this threshold is when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e. the change in average stopped delay for critical movements is negative). In this case, the threshold is when the project increases the critical V/C value by .01 or more.

Caltrans Peak-Hour Signal Warrant Analysis

For the purpose of this analysis, a project is said to create a potentially significant adverse impact on traffic conditions at an unsignalized intersection if for either peak hour:

The approach volumes on the intersecting streets are sufficiently high to satisfy signal warrant #11, "Peak-Hour Signal Warrant," as described in the *Traffic Manual* published by Caltrans.

In this analysis, a significant impact at an unsignalized intersection can be considered satisfactorily mitigated by installation of a traffic signal.

CMP Definition of Significant Freeway Segment Impacts

A project is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour:

1. The level of service on the freeway segment is an unacceptable LOS F under project conditions, and

2. The number of project trips on that segment constitutes at least one percent of capacity on that segment.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to LOS E or better.

Project Traffic Estimates

The amount of traffic associated with a development is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amount of traffic entering and exiting the site is estimated on a peak hour basis. In the second step, the directions of approach and departure of project traffic are estimated. In the third step, the trips are assigned to specific streets and intersections. This process is described in the following sections.

Trip Generation

The amount of traffic generated by the proposed project was estimated by applying the appropriate trip generation rates to the size of the development. The trip generation rates used were those published in the *ITE Trip Generation Manual, Seventh Edition, 2003* for R & D and retail uses. Based on these rates, the project is estimated to generate 784 AM peak-hour trips and 689 PM peak-hour trips. Using the inbound/outbound splits recommended by ITE, the project would produce 650 inbound and 134 outbound trips during the AM peak hour, and 105 inbound and 584 outbound trips during the PM peak hour. The project's trip generation estimates are presented in Table 8.

Table 8
Project Trip Generation

Land Use	Size[1]	AM Peak Hour rate	% in	% out	total	in	out	PM Peak Hour rate	% in	% out	total	in	out
R & D (Parcel 6 - Proposed Project)	540.2	1.24	83%	17%	670	556	114	1.08	15%	85%	583	87	496
Additional R & D (Parcel 3)	89.8	1.24	83%	17%	111	92	19	1.08	15%	85%	97	14	83
Retail	2.5	1.03	61%	39%	3	2	1	3.75	48%	52%	9	4	5
Total	633				784	650	134				689	105	584

Source: R & D (760), Retail - Shopping Center (820) ITE *Trip Generation*, Seventh Edition, 2003.
[1] Size is expressed in 1000 square feet.

Trip Distribution & Assignment

The proposed project's trip distribution pattern was estimated based on travel patterns suggested by the C/CAG travel demand forecasting model system (TDM 1101). The trips generated by the proposed project were then assigned to the roadway network based on this directional distribution during the peak hours of adjacent street traffic. Figure 8 shows the proposed project's trip distribution and assignment.

Intersection Level of Service Analysis

The results of the level of service analysis under project conditions are summarized in Table 9. The level of service calculation sheets are included in Appendix B. Under project conditions, the results show that three of the study intersections would operate at an unacceptable LOS measured against the City of Brisbane level of service guidelines. The unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F during the AM peak hour. The unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F during the PM peak hour. The unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F during the PM peak hour. The remaining study intersections would operate at an acceptable LOS.

Based on the *Second Amendment to Agreement Concerning Project Approval Document,* November 17, 2003, the Developer and the City have agreed that the mitigation measures developed in the Fehr & Peers Associates, Inc. memorandum *Sierra Point Improvement Phasing Analysis,* shall be completed when traffic volumes reach the thresholds as shown in Table 10. The intersections of Sierra Point Parkway/Shoreline Court and Sierra Point Parkway/Lagoon Way would reach the established triggers during both the AM and PM peak hours. The intersection of Sierra Point Parkway/US 101 NB off-ramp would not reach the triggers during the AM or PM peak hours.

Significant Impact: During the AM peak hour, the unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS C under background conditions. Under project conditions it would operate at LOS F. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation: To mitigate this impact, the intersection of Sierra Point Parkway/US 101 NB Ramp would need to be signalized. This mitigation measure would allow the intersection to operate at LOS C during the AM peak hour and LOS A during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS C under background conditions. Under project conditions it would operate at LOS F. According to the City of Brisbane guidelines, this would constitute a significant impact. In addition, the intersection also would reach the traffic volume thresholds established in the *Second Amendment to Agreement Concerning Project Approval Document* during both the AM and PM peak hours.

Mitigation: Based on the *Second Amendment to Agreement Concerning Project Approval Document* and the agreed upon mitigation in the *Sierra Point Improvement Phasing Analysis*, the intersection of Sierra Point Parkway/Lagoon Way would need to be signalized and a second northbound through lane should be added. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS B during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS C under background conditions. Under project conditions it would operate at LOS F. According to the City of Brisbane guidelines, this would constitute a significant impact. In addition, the intersection also would reach the traffic volume thresholds established in the *Second Amendment to Agreement Concerning Project Approval Document* during both the AM and PM peak hours.

Mitigation: To mitigate this impact, the intersection of Sierra Point Parkway/Shoreline Court would need to be signalized and the addition of a second northbound left-turn lane, a second southbound right-turn lane, and a second eastbound left-turn lane would be required. It appears that the *Phase I – Interim Improvement* of an eastbound right-turn lane has already been constructed and would not need to be part of this mitigation. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS C during the PM peak hour.

Table 9
Project Condition Levels of Service

Intersection	Peak Hour	Background Ave. Delay	Background LOS	Project Conditions Ave. Delay	Project Conditions LOS	Project Conditions Incr. In Crit Delay	Project Conditions Incr. In Crit V/C
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	32.4	C	33.6	C	0.8	0.008
	PM	31.0	C	31.3	C	0.6	0.006
2. Alemany Blvd and Congdon St	AM	14.1	B	14.1	B	0.0	0.004
	PM	14.9	B	14.9	B	0.0	0.002
3. Alemany Blvd and Geneva Ave	AM	36.0	D	36.0	D	0.1	0.001
	PM	33.4	C	33.4	C	0.1	0.006
4. Mission St and Geneva Ave	AM	10.3	B	10.3	B	0.0	0.002
	PM	10.9	B	10.9	B	0.0	0.008
5. Bayshore Blvd and Geneva Ave	AM	16.4	B	16.4	B	0.1	0.004
	PM	18.2	B	18.3	B	0.0	0.017
6. Bayshore Blvd and Old County Road*	AM	20.4	C	21.5	C	0.2	0.005
	PM	22.1	C	22.7	C	0.6	0.013
7. Tunnel Ave and Lagoon Wy	AM	8.9	A	9.7	A	0.8	0.092
	PM	9.2	A	10.1	B	0.8	0.067
8. Sierra Point Pkwy and Lagoon Wy	AM	9.9	A	29.0	D	19.1	0.526
	PM	16.9	C	55.4	F	38.5	0.336
9. Sierra Point Pkwy and US 101 NB Ramps	AM	17.9	C	315.9	F	-	-
	PM	9.9	A	11.4	B	-	-
10. Sierra Point Pkwy and Shoreline Ct	AM	10.4	B	14.7	B	4.3	0.195
	PM	18.4	C	68.5	F	50.2	0.441

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

Note: The intersection of Sierra Point Pkwy and US 101 NB ramps is stop controlled in the northbound direction and uncontrolled in the east/westbound, critical delay does not apply in this instance.

Table 10
Intersection Trigger Thresholds

Intersection	Volume Threshold		Project Conditions Vol.		Improvements Required?
	AM Peak	PM Peak	AM Peak	PM Peak	
Sierra Point Pkwy and Shoreline Ct	1680	1460	1708	1793	Yes
Sierra Point Pkwy and US 101 NB off-ramp	2200	1970	1708	1793	No
Sierra Point Pkwy and Lagoon Wy	1590	1360	1708	1793	Yes

Note: Volume thresholds and project conditions volume are for two-way volume on Sierra Point Pkwy west of Shoreline Ct.

Source: Second Amendment to Agreement Concerning Project Approval Document and Fehr & Peers Sierra Point Improvement Phasing Analysis Update.

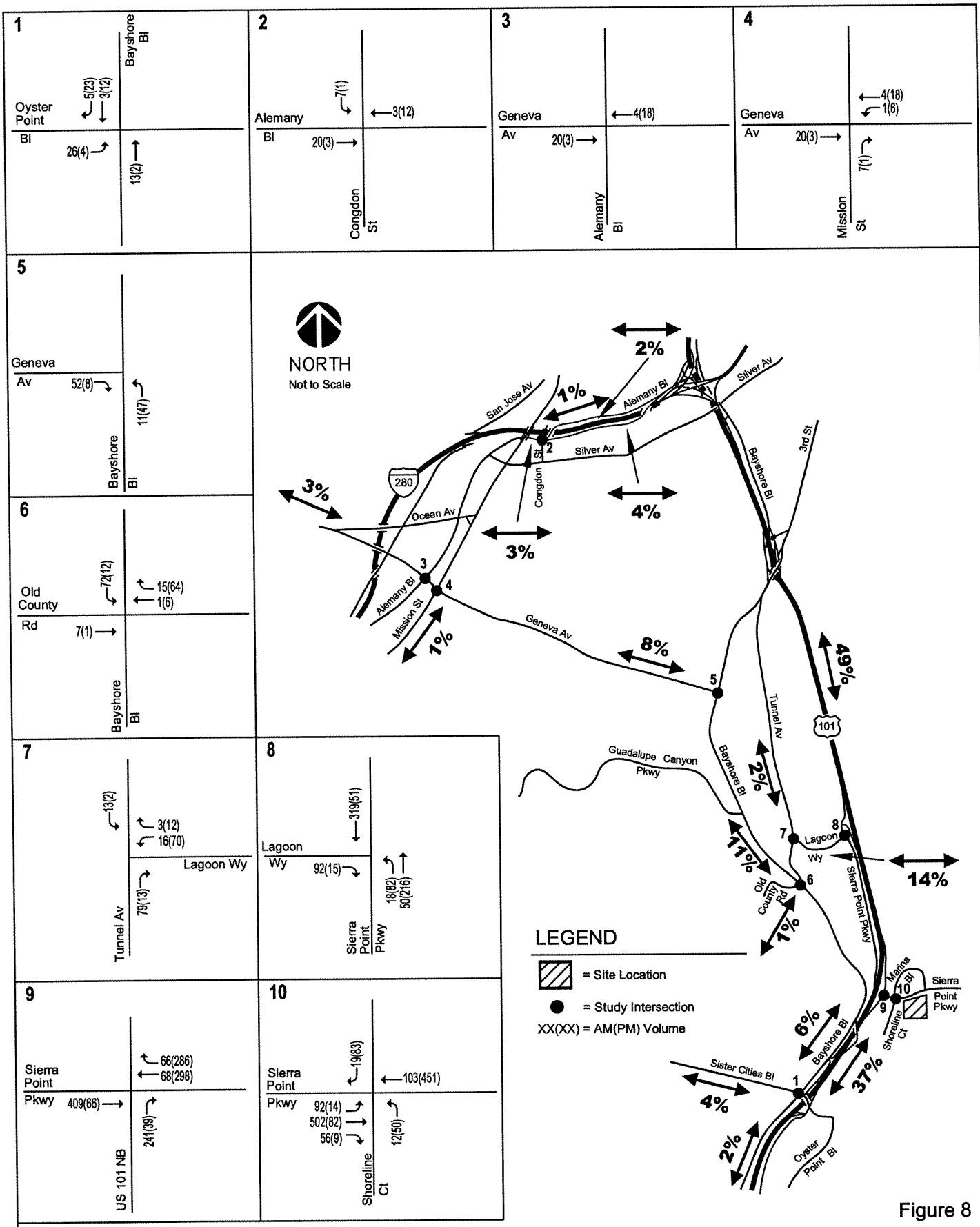

Figure 8

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Hexagon Transportation Consultants, Inc.

Sierra Biotech

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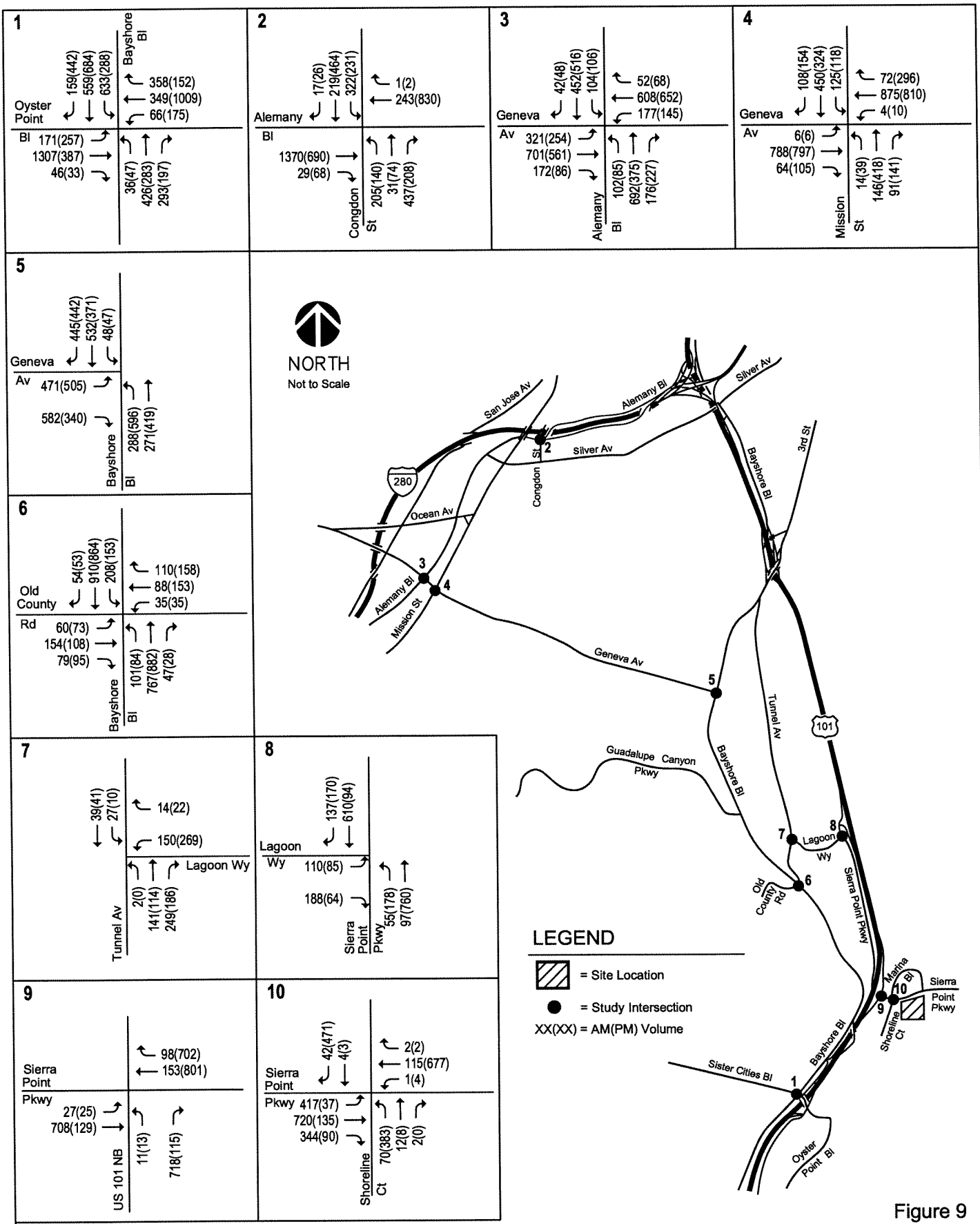


Figure 9

PROJECT CONDITION TRAFFIC VOLUMES

Sierra Biotech

Hexagon Transportation Consultants, Inc.

JH D:\Projects\Sierra Biotech\Project Conditions.dwg

Project Signal Warrants

The peak-hour signal warrant was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of project peak-hour volumes. The analysis showed that under project conditions the intersection of Sierra Point Parkway/Shoreline Court would meet the signal warrant during the PM peak hour. The other three unsignalized study intersections do not meet the peak-hour volume warrant. The signal warrants are included in Appendix E.

Project Freeway Segment Analysis

Project traffic volumes on freeway segments were established by adding to existing freeway volumes the estimated project trips on freeway segments. The results of the analysis are summarized in Table 10. The results show that none of the directional freeway segments analyzed would operate at an unacceptable LOS F during at least one of the peak hours under project conditions. All of the analyzed freeway segments would operate at an acceptable LOS E or better during the AM and PM peak hours.

Table 11
Project Freeway Levels of Service

Freeway	Segment	Direction	Hour	Lanes	Volume/a/	V/C	LOS	Volume	Capacity
US 101	Harney Wy to Sierra Point Pkwy	SB	AM	4	8,975	0.98	E	319	3.5%
			PM	4	7,826	0.85	D	51	0.6%
US 101	Sierra Point Pkwy to Oyster Point Blvd	SB	AM	4	7,405	0.80	D	50	0.5%
			PM	4	7,629	0.83	D	216	2.3%
I - 280	Alemany Blvd to San Jose Ave	SB	AM	4	5,459	0.59	A	1	0.0%
			PM	4	8,657	0.94	E	6	0.1%
US 101	Oyster Point Blvd to Sierra Point Pkwy	NB	AM	4	7,725	0.84	D	241	2.6%
			PM	4	8,451	0.92	E	39	0.4%
US 101	Sierra Point Pkwy to Harney Wy	NB	AM	4	7,233	0.79	C	66	0.7%
			PM	4	7,879	0.86	D	286	3.1%
I - 280	San Jose Ave to Alemany Blvd	NB	AM	4	7,673	0.83	D	7	0.1%
			PM	4	5,689	0.62	B	1	0.0%

/a/ Source: Caltrans freeway count data.

Transit Impacts

Transit service in the project vicinity would be provided via Caltrain, BART, Light Rail, and several Samtrans operated bus routes. Assuming up to three percent transit mode share for the project equates to approximately 24 new transit riders during the AM peak commute period and 23 new transit riders during the PM peak period. These new riders easily could be accommodated by the available ridership capacity of the nearby bus and rail lines. Thus, no major improvements to the existing transit facilities would be necessary. However, Samtrans may consider adjusting the schedules for bus routes near the project site to accommodate any shift in ridership patterns.

Site Access, Circulation, and Parking

This section describes the site access, circulation, and parking aspects of the proposed research and development project. This review is based on a project plan supplied to Hexagon and dated May 5, 2006.

Site Access

The proposed site plan shows two project driveways on Sierra Point Parkway and one driveway on Shoreline Court. The three proposed project driveways are full-access, allowing for left-in, right-in, left-out, and right-out maneuvers. All project driveways would contain one inbound lane and one outbound lane.

ITE standards for driveway design and location were used to evaluate the project driveways on Sierra Point Parkway and Shoreline Court. ITE recommends the following standards for two-way commercial driveways:

- Widths between 30 to 40 feet and 15-feet radii (driveways with low-volume activity may have widths of 24 feet, providing that 20-foot radii are used).
- Spacing of at least 35 feet apart.
- 51-150 feet of frontage for two driveways.

There is approximately 1,400 feet of property frontage on Sierra Point Parkway, which is sufficient for the two driveways. The western driveway on Sierra Point Parkway is 24 feet wide, while the eastern driveway is 32 feet wide, and the Shoreline Court driveway is 24 feet wide.

Based on the current site plan, the project would meet these criteria with the following exceptions.

- Project driveway curb radii are not shown on the site plan.

- The alignment of the proposed project driveway at the western end of Sierra Point Parkway is offset from the existing driveway on the opposite side of the street. Generally, it is desirable for all opposing roadways to line up at their centerlines, or be offset sufficiently to allow for proper vehicle channelization. Depending on the movements permitted at these driveways, further analysis may need to be done.

Some general recommendations for the current site plan are as follows.

- In order to ensure there would be sufficient sight distance at the project driveways, it would be necessary to maintain some of the existing parking prohibitions on-street along the site frontages

in the vicinity of the driveways. Any landscaping, parking, and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site.

- The project site should provide for a minimum 20-foot turning radius at the western driveway on Sierra Point Parkway and the driveway at Shoreline Court; and a minimum 15-foot radius at the eastern driveway on Sierra Point Parkway.

- The designer should confirm that the proposed access driveways are designed to not conflict with the traffic signal and related improvement plans at the Sierra Point Parkway and Shoreline Court intersection (reference Second Amendment to Project Approval dated 11/17/03 between the City of Brisbane and Sierra Point, L.L.C.).

Site Circulation

The onsite circulation was reviewed in accordance with generally accepted traffic engineering standards. Generally, the proposed plan would provide adequate connectivity through the parking areas for vehicles. The project would provide 90-degree parking throughout the site. There is one proposed dead-end aisle at the southwest end of the project site. Dead end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic.

The design of the site circulation and access for the parking structure should consider the driveway and ramp width to the structure, the ramp slope, the ramp vertical clearance, the inside turning radius at all locations of change in aisle direction, and the width of the drive aisles. The ramp design is not shown and therefore could not be evaluated.

Parking

According to Slough Estates International, the project applicant, the proposed development would consist of 540,185 s.f. of office/R&D space and 2,500 s.f. of retail space. Based on the size of the development, the applicant is proposing 419 surface parking spaces, 131 parking spaces within Building C, and a six-story parking structure with 1,236 parking spaces. This brings the total parking spaces provided by the proposed project to 1,786 spaces. However, the current level of detail on the site plan shows only the 419 surface spaces distributed throughout the site.

The project applicant should demonstrate that the proposed plan would comply with the City of Brisbane parking standard which states 1 parking space per 300 square feet. Based on this rate, the proposed project should provide 1,800 parking spaces for the R&D uses and an additional 9 parking spaces for retail uses. Therefore, the proposed project should provide a total of 1,809 parking spaces.

A comparable development in South San Francisco was used for comparison purposes only. Based on the City of South San Francisco parking code used for the Genentech project, at the rate of 1.6 spaces per 1,000 s.f., the proposed project would require 863 parking spaces for the R&D uses and an additional 9 parking spaces for retail uses. Therefore, the proposed project would require a total of 872 parking spaces.

The project proposes 1,786 on-site parking spaces. This is less than the 1,809 on-site parking spaces that would be required based on the City of Brisbane parking code.

Based on these calculations the project would not satisfy the minimum on-site parking requirements. However, this condition does not constitute a significant impact as the additional spaces that would be required for the project site could be accommodated by an adjacent underutilized City parking lot

associated with the marina. Therefore, no significant impact related to parking is associated with the project.

Pedestrian and Bicycle Facilities

Pedestrian traffic primarily would be generated by transit stops, and nearby businesses. The extensive network of sidewalks within the study area would provide workers with a safe connection between the project site and the other surrounding land uses in the area. Although the project would increase the demand for pedestrian facilities, the incremental increase in pedestrian travel as a result of the project would be small, and therefore, would not be considered significant.

Many of the roadways near the project site are designated bike routes. A reasonable and conservative assumption for bicycle commute trip generation would be a one percent mode share. This calculates to approximately 7 new peak hour bicycle trips in the AM and about 7 bicycle trips in the PM peak period of traffic. Thus, the project would have very little impact on the existing bicycle facilities in the study area.

In summary, the proposed project would not have an adverse effect on the existing pedestrian or bicycle facilities in the study area.

5.
Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions. The analysis of cumulative conditions was conducted based on projected roadway link volumes using year 2030 land use data. AM and PM peak hour traffic volumes were developed using the C/CAG Travel Demand Model System "TDM 1101" for 2030.

Cumulative Intersection Impact Criteria

According to the City of Brisbane cumulative impacts at signalized and unsignalized intersections occur when:

1. The level of service at an intersection drops below its LOS standard (LOS C on Bayshore Blvd/Old County Rd and San Bruno Ave/Old County Rd intersections, and LOS D at all other intersections) when project traffic is added; or

2. An intersection that is operating worse than its level of service standard under background conditions has an increase in critical delay of four or more seconds.

On roadway segments under cumulative conditions, a project is said to benefit a roadway segment if:

- The roadway segment is projected to operate below its LOS standard under the cumulative background and the proposed project plus cumulative background is projected to cause a decrease in traffic of at least one percent of its capacity.

For CMP roadway segments, the minimum acceptable level of service is LOS E. With respect to roadway segments in Brisbane that are not CMP roadway segments, the minimum acceptable level of service is LOS D. US 101 and I-280 are the only CMP roadways analyzed for this study.

Cumulative Freeway Segment Impact Criteria

According to the CMP, a development is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour:

1. The level of service on the freeway segment degrades from an acceptable LOS E or better to an unacceptable LOS F or,

2. The cumulative analysis indicates that the combination of the proposed project and future cumulative traffic volumes will result in the freeway segment to operate at a level of service F and the proposed project increases traffic demand on the segment by an amount equal to one percent or more of the segment capacity, or causes the segment volume-to-capacity (v/c) ratio to increase by one percent.

These guidelines are according to C/CAG's *Policy on Traffic Impact Analysis (TIA) To Determine Traffic Impacts on the Congestion Management Program (CMP) Roadway Network Resulting From Roadway Changes, General Plan Updates, and Land Use Developments.*

2030 Network Assumptions

The year 2030 roadway network includes planned transportation improvements. The improvements included in the C/CAG Travel Demand Forecast Model System for year 2030 have a high probability of receiving funding in the future. Within the study area, the following improvement was included:

- **Geneva Avenue.** Geneva Avenue will be extended between Bayshore Boulevard and the US 101/Beatty Avenue interchange.

Planned improvements on US 101, specifically auxiliary lanes between Sierra Point Parkway and the County Line; and between Sierra Point Parkway and San Bruno Avenue were not included in the 2030 model run of cumulative traffic volumes; yielding a potentially more conservative estimate of 2030 traffic volumes on the local street system.

Year 2030 Traffic Volumes

The proposed project would add 540,185 s.f. of R&D, with a possible addition of 89,800 s.f. R&D on a separate parcel, and 2,500 s.f. or retail to the Sierra Point area. For the purposes of estimating the cumulative impacts of the project, the traffic impacts of the project were evaluated relative to the 2030 cumulative traffic volumes without the project. The traffic estimates for the 2030 cumulative plus project were produced using a three-step process:

- **Traffic Generation and Trip Distribution.** The 2030 C/CAG Travel Demand Forecasting System was run using ABAG Projections 2005 for year 2030. These projections of jobs and household reflect all new development in Brisbane (including Sierra Point), South San Francisco, and the Executive Park/Candlestick Park areas of San Francisco.

- **Traffic Assignment.** The 4-hour AM and PM vehicle trip tables, derived from the peak period diurnal model, were assigned to the AM and PM transportation networks using equilibrium highway assignment. As part of this process, a detailed account of the assignment of the project trips for Sierra

Point Biotech was also produced. The project trips were subtracted from the total "cumulative plus project" volumes to yield "cumulative without project" traffic volumes.

Year 2030 Traffic Impacts

The results of the level of service analysis under cumulative conditions are summarized in Table 11. The level of service calculation sheets are included in Appendix B. Under year 2030 (cumulative) conditions, the results show that four of the study intersections would operate at an unacceptable LOS measured against the City of Brisbane level of service guidelines. The unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F during the AM peak hour. The unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F during the PM peak hour. The unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F during the PM peak hour. Without the project, the signalized intersection of Bayshore Boulevard/Old County Road would operate at LOS D during the AM peak hour and LOS C during the PM peak hour. Under cumulative conditions with the project it would operate at LOS D during the AM peak hour, with an increase in the average delay of more than 4 seconds. During the PM peak hour, the intersection would operate at a LOS D. The remaining study intersections would operate at an acceptable LOS.

Significant Impact: During the AM peak hour, the unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F under cumulative conditions (year 2030) without the project. Under cumulative conditions with the project it would operate at LOS F, with an increase in the average delay of more than 4 seconds. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation: To mitigate this impact, the intersection of Sierra Point Parkway/US 101 NB Ramp would need to be signalized. This mitigation measure would allow the intersection to operate at LOS F during the AM peak hour, with a decrease in the average delay compared to the cumulative condition without the project, and LOS C during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F under cumulative conditions (year 2030) without the project. Under cumulative conditions with the project it would operate at LOS F, with an increase in the average delay of more than 4 seconds. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation: Using the mitigation applied under Project Conditions, the intersection of Sierra Point Parkway/Lagoon Way would need to be signalized and a second northbound through lane should be added. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS B during the PM peak hour.

Significant Impact: During the PM peak hour, the unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F under cumulative conditions (year 2030) without the project. Under cumulative conditions with the project it would operate at LOS F, with an increase in the average delay of more than 4 seconds. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation: Using the mitigation applied under Project Conditions, the intersection of Sierra Point Parkway/US 101 NB Ramp would need to be signalized and the addition of a second northbound left-turn lane, a second southbound right-turn lane, and a second eastbound left-turn lane would be required. It appears that the *Phase I – Interim Improvement* of an eastbound right-turn lane has

already been constructed and would not need to be part of this mitigation.. This mitigation measure would allow the intersection to operate at LOS B during the AM peak hour and LOS C during the PM peak hour.

Significant Impact: Under cumulative conditions (year 2030) without the project, the signalized intersection of Bayshore Boulevard/Old County Road would operate at LOS D during the AM peak hour and LOS C during the PM peak hour. Under cumulative conditions with the project it would operate at LOS D during the AM peak hour, with an increase in the average delay of more than 4 seconds. During the PM peak hour, the intersection would operate at a LOS D. According to the City of Brisbane guidelines, this would constitute a significant impact.

Mitigation 1: A possible mitigation at the intersection of Bayshore Boulevard/Old County Road would be to add a second eastbound left-turn lane and convert the existing shared-through-left to a through lane. This would change the existing eastbound geometry from one left-turn, one shared-through-left, and one right-turn to two left-turns, one through lane, and one right-turn lane. This mitigation measure would allow the intersection to operate at LOS C during both the AM and PM peak hours. This may require the need for additional right-of-way to be obtained from the nearby property owners.

Mitigation 2: Another possible mitigation at the intersection of Bayshore Boulevard/Old County Road would be to add a westbound through lane. This would change the existing westbound geometry from one shared-through-left and one right-turn to one shared-through-left, one through lane, and one right-turn lane. This mitigation measure would allow the intersection to operate at LOS C during both the AM and PM peak hours. This may require the need for additional right-of-way to be obtained from the nearby property owners.

Mitigation 3: One final possible mitigation measure would be to adjust the signal timing of the intersection which could improve the LOS to an acceptable level.

Table 12
Future Intersection Levels of Service

Intersection	Peak Hour	Cumulative Ave. Delay	Cumulative LOS	Cumulative + Proj Ave. Delay	Cumulative + Proj LOS
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	133.6	F	127.7	F
	PM	21.4	C	21.3	C
2. Alemany Blvd and Congdon St	AM	11.9	B	10.5	B
	PM	10.7	B	10.6	B
3. Alemany Blvd and Geneva Ave	AM	215.6	F	217.4	F
	PM	65.3	E	67.4	E
4. Mission St and Geneva Ave	AM	190.4	F	191.7	F
	PM	70.5	E	72.5	E
5. Bayshore Blvd and Geneva Ave	AM	295.3	F	295.5	F
	PM	72.0	E	75.4	E
6. Bayshore Blvd and Old County Road*	AM	36.9	D	42	D
	PM	34.8	C	36.5	D
7. Tunnel Ave and Lagoon Wy	AM	20.6	C	25.5	D
	PM	27.5	D	33.4	D
8. Sierra Point Pkwy and Lagoon Wy	AM	14.4	B	16.5	C
	PM	83.9	F	220.7	F
9. Sierra Point Pkwy and US 101 NB Ramps	AM	153.7	F	620	F
	PM	13.2	B	18.5	C
10. Sierra Point Pkwy and Shoreline Ct	AM	8.8	A	10.6	B
	PM	86.1	F	319.8	F

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

Cumulative Freeway Impacts and Mitigations

Cumulative traffic volumes on the freeway segments were obtained from the C/CAG 2030 Travel Demand Forecasting Model. These volumes were used to determine possible CMP impacts on the directional freeway segments. The results of the analysis are summarized in Table 12.

The results show that eight of the twelve directional freeway segments analyzed would operate at an unacceptable LOS F during at least one of the peak hours under cumulative conditions.

Cumulative traffic would constitute one percent or more of freeway capacity on three of the eight LOS F directional freeway segments studied. Therefore, based on the CMP criteria for significant impacts on freeways, the project would contribute to cumulatively significant impacts on freeways.

Significant Impact: The project would contribute to cumulatively significant freeway level of service impacts on the following three directional freeway segments:

US 101 southbound between Harney Wy and Sierra Point Pkwy - AM
US 101 southbound between Sierra Point Pkwy and Oyster Point Blvd - PM
US 101 northbound between Oyster Point Blvd and Sierra Point Pkwy – AM

The remaining study directional freeway segments would operate at an acceptable LOS E or better.

Mitigation 1: In accordance with CMP requirements, the project may be required to implement Travel Demand Management (TDM) measures to the extent that the measures will "mitigate" the project impacts. These measures are provided in the San Mateo County *Final Congestion Management Program* and are ultimately decided by the project applicant and the City. However, mitigation measures, involving implementation of TDM measures, are typically designed to achieve a 10-20% traffic reduction. Even with these reductions the freeway segments could continue to operate above the CMP threshold for significant impacts. Some of the measures that could be implemented are shown below:

- Provide for increased frequencies of existing dedicated shuttle service during the peak period to a rail station or residential area; coordinate with Caltrain shuttle services with respect to locations of stops and related amenities.
- Provide secure bicycle parking
- Operation of a commute assistance center, offering on site, one stop shopping for transit and commute alternatives information, preferably staffed with a live person to assist building tenants with trip planning.
- Flextime: Implementation of an alternate hours workweek program.

Mitigation 2: The mitigation necessary to reduce significant impacts on freeways is the widening of the freeway. Due to the substantial cost, this measure is not considered feasible for a single development project.

Therefore, the freeway segment impacts are considered significant and unavoidable.

Table 13
Cumulative Freeway Segment Levels of Service

						Cumulative w/ Project			Project Trips	
Freeway	Segment	Direction	Peak Hour	# of Lanes	Total Capacity[1]	Volume	V/C	LOS	Volume	% Capacity
US 101	Harney Wy to Sierra Point Pkwy	SB	AM	4	9200	9,294	1.01	F	319	3.5%
			PM	4	9200	10,205	1.11	F	51	0.6%
US 101	Sierra Point Pkwy to Oyster Point Blvd	SB	AM	4	9200	7,455	0.81	D	50	0.5%
			PM	4	9200	10,073	1.09	F	216	2.3%
I - 280	Alemany Blvd to San Jose Ave	SB	AM	4	9200	5,460	0.59	A	1	0.0%
			PM	4	9200	11,536	1.25	F	6	0.1%
US 101	Oyster Point Blvd to Sierra Point Pkwy	NB	AM	4	9200	10,261	1.12	F	241	2.6%
			PM	4	9200	9,443	1.03	F	39	0.4%
US 101	Sierra Point Pkwy to Harney Wy	NB	AM	4	9200	9,388	1.02	F	66	0.7%
			PM	4	9200	8,844	0.96	E	286	3.1%
I - 280	San Jose Ave to Alemany Blvd	NB	AM	4	9200	11,003	1.20	F	7	0.1%
			PM	4	9200	7,380	0.80	D	1	0.0%

Note: Volumes obtained from C/CAG 2030 Travel Demand Forecasting Model
[1] Total capacity is equal to 2,300 vehicles per lane per hour multiplied by the number of lanes.

[ ] = freeway impact per CMP guidelines

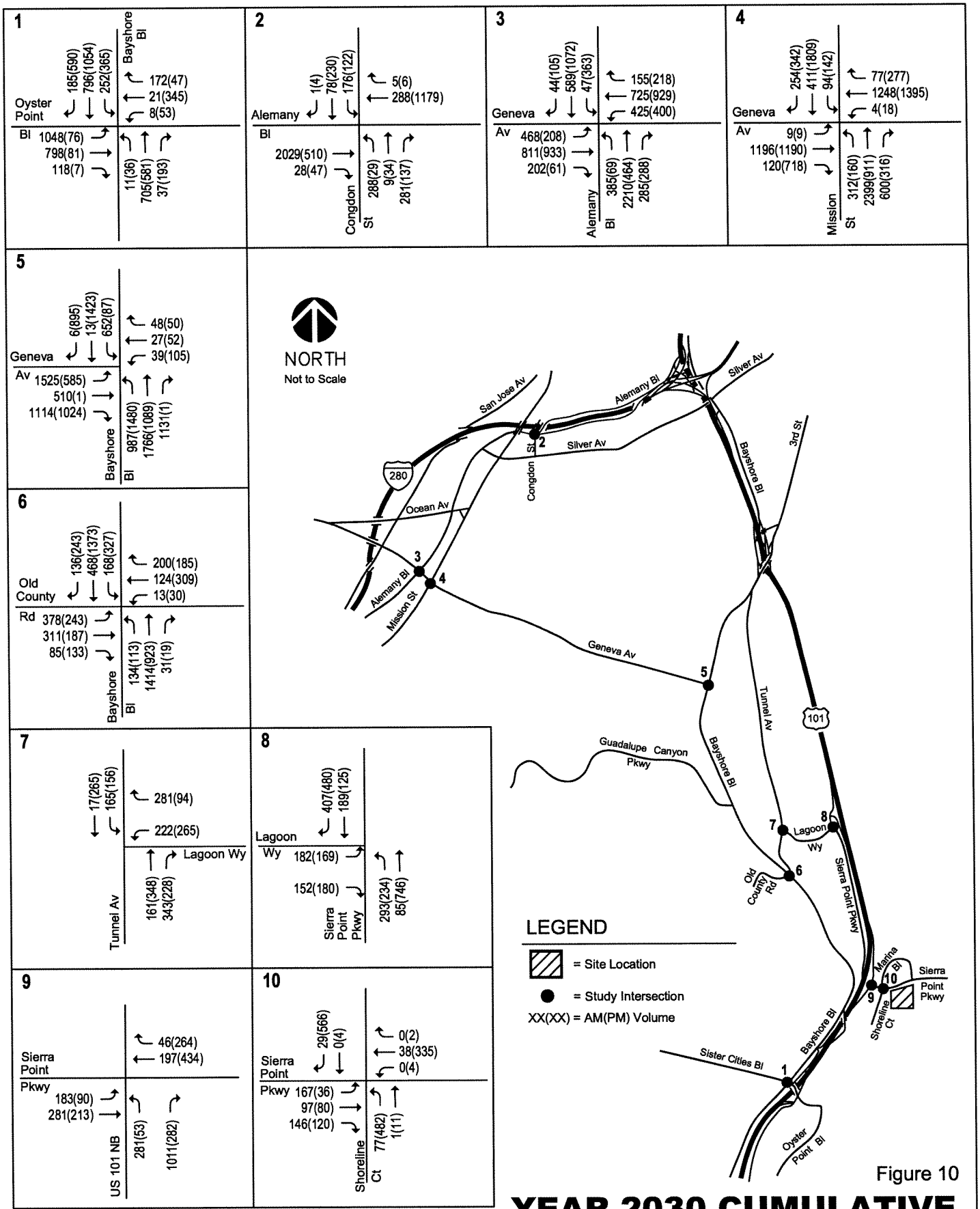


Figure 10

YEAR 2030 CUMULATIVE WITHOUT PROJECT TRAFFIC VOLUMES

Sierra Biotech

Hexagon Transportation Consultants, Inc.

JH D:\Projects\Sierra Biotech\Cumulative Without.dwg

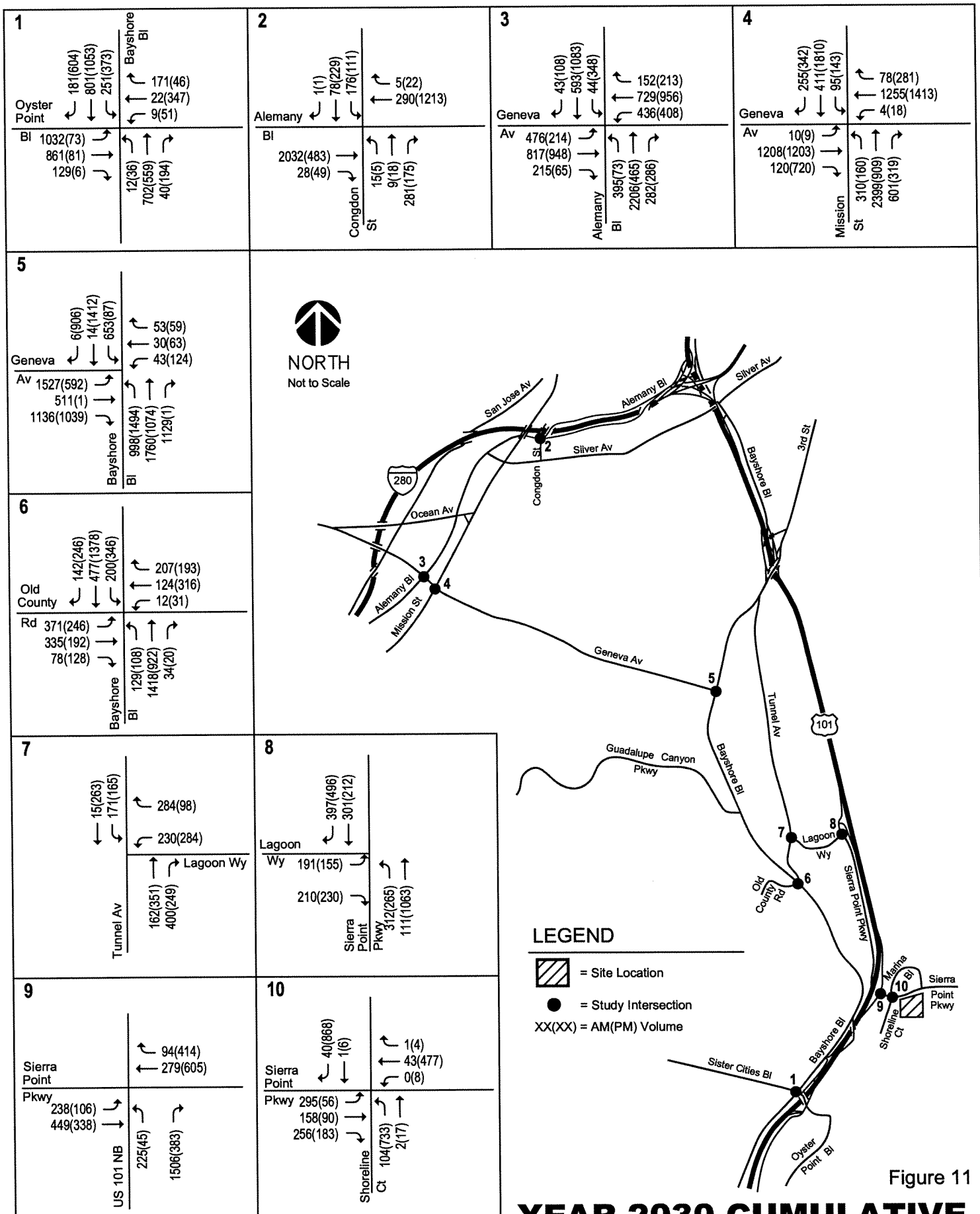


Figure 11

YEAR 2030 CUMULATIVE WITH PROJECT TRAFFIC VOLUMES

Sierra Biotech

Hexagon
Transportation Consultants, Inc.

JH D:\Projects\Sierra Biotech\Cumulative.dwg

Appendix F

Alternative Analyses

Alternative Analyses:

Analysis 1: Alternate Site Plan

This section describes the site access, circulation, and parking aspects of the alternative site plan for the proposed research and development project. This review is based on a project plan supplied to Hexagon and dated September 20, 2006 (see Figure F-1).

Site Access

The proposed site plan shows two project driveways on Sierra Point Parkway and one driveway on Shoreline Court. The three proposed project driveways are full-access, allowing for left-in, right-in, left-out, and right-out maneuvers. All project driveways would contain one inbound lane and one outbound lane. There is approximately 1,400 feet of property frontage on Sierra Point Parkway, which is sufficient for the two driveways. These driveways would meet the ITE spacing requirements listed in the Project chapter.

Based on the alternate site plan, the project would meet ITE standards with the following exceptions.

- Project driveway widths and curb radii are not shown on the site plan.
- Based on the site plan provided, Hexagon was unable to determine if proper alignment exists between the project driveways and any existing driveways opposite the project site. Generally, it is desirable for all opposing roadways to line up at their centerlines, or be offset sufficiently to allow for proper vehicle channelization. Depending on the movements permitted at these driveways, further analysis may need to be done.

Some general recommendations for the current site plan are as follows.

- In order to ensure there would be sufficient sight distance at the project driveways, it would be necessary to maintain some of the existing parking prohibitions on-street along the site frontages in the vicinity of the driveways. Any landscaping, parking, and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site.
- The project site should provide for a minimum 20-foot turning radius at the western driveway on Sierra Point Parkway and the driveway at Shoreline Court; and a minimum 15-foot radius at the eastern driveway on Sierra Point Parkway.
- The designer should confirm that the proposed access driveways are designed to not conflict with the traffic signal and related improvement plans at the Sierra Point Parkway and Shoreline Court intersection (reference Second Amendment to Project Approval dated 11/17/03 between the City of Brisbane and Sierra Point, L.L.C.).

Under this alternative site plan, traffic volumes would be redistributed at the intersection of Sierra Point Parkway and Shoreline Court (Original site plan had 90% of the project site traffic accessing the Sierra Point Parkway driveways and 10% accessing via Shoreline Court. Under the alternate site plan, 75% of the project site traffic would take access via the Sierra Point Parkway driveways and 25% would access the site via Shoreline Court). However, the level of service would remain at LOS B during the AM peak

hour and LOS F during the PM peak hour. The average delay at the intersection would remain unchanged during the AM peak hour and would increase by 12 seconds during the PM peak hour. By signalizing this intersection and assuming all of the recommended mitigation in this report is implemented, the intersection would operate at LOS B during the AM peak hour and LOS D during the PM peak hour.

Site Circulation

The onsite circulation was reviewed in accordance with generally accepted traffic engineering standards. Generally, the proposed plan would provide adequate connectivity through the parking areas for vehicles. The project would provide 90-degree parking throughout the site. There is one proposed dead-end aisle at the southwest end of the project site. Dead end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic.

The design of the site circulation and access for the parking structure should consider the driveway and ramp width to the structure, the ramp slope, the ramp vertical clearance, the inside turning radius at all locations of change in aisle direction, and the width of the drive aisles. The ramp design is not shown and therefore could not be evaluated.

Parking

According to Slough Estates International, the project applicant, the proposed development would consist of 540,185 s.f. of office/R&D space and 2,500 s.f. of retail space. Based on the size of the development, the applicant is proposing 572 surface parking spaces, 137 parking spaces within Building C, a four-story parking structure at the southwest corner of the project site consisting of 412 parking spaces, and a five-story parking structure at the northeast corner of the project site consisting of 678 parking spaces. This brings the total parking spaces provided by the proposed project to 1,799 spaces. However, the current level of detail on the site plan shows only one level of parking for each parking structure and the 572 surface spaces distributed throughout the site.

The project applicant should demonstrate that the proposed plan would comply with the City of Brisbane parking standard which states 1 parking space per 300 square feet. Based on this rate, the proposed project should provide 1,800 parking spaces for the R&D uses and an additional 9 parking spaces for retail uses. Therefore, the proposed project should provide a total of 1,809 parking spaces.

The project proposes 1,799 on-site parking spaces. This is less than the 1,809 on-site parking spaces that would be required based on the City of Brisbane parking code.

Based on these calculations the project would not satisfy the minimum on-site parking requirements. The 10 spaces by which the project is short will likely be associated with the proposed retail, assuming that most workers arrive early in the morning (generally before retail-related trips arrive). Therefore, this condition does not constitute a significant impact as the approximately 10 spaces that would be required for the 2,500 s.f. retail space located within the proposed parking garage could be accommodated by the adjacent underutilized City parking lot associated with the marina. Therefore, no significant impact related to parking is associated with the project.

Analysis 2: No Project Under Existing General Plan

The No Project alternative, assumes the development of a 630,000 square feet office park on the project site as currently approved under the Sierra Point Master Plan. This alternative would not require General Plan or Zoning Ordinance amendments and was conceptually approved by the City in the 1984 Development Agreement.

Trip Generation

The amount of traffic generated by the No Project scenario was estimated by applying the appropriate trip generation rates to the size of the development. The trip generation rates used were those published in the *ITE Trip Generation Manual, Seventh Edition, 2003* for office parks. Based on these rates, the project is estimated to generate 1,096 AM peak-hour trips and 945 PM peak-hour trips. Using the inbound/outbound splits recommended by ITE, the project would produce 975 inbound and 121 outbound trips during the AM peak hour, and 132 inbound and 813 outbound trips during the PM peak hour. The project's trip generation estimates are presented in Table 1-A. The No Project trip distribution was the same as that used for the proposed project.

Table A-1
Project Trip Generation

		AM Peak Hour						PM Peak Hour					
Land Use	Size[1]	rate	% in	% out	total	in	out	rate	% in	% out	total	in	out
R & D	630.0	1.74	89%	11%	1096	975	121	1.50	14%	86%	945	132	813

Source: Office Park (750) ITE *Trip Generation*, Seventh Edition, 2003.
[1] Size is expressed in 1000 square feet.

Intersection Level of Service Analysis

The results of the level of service analysis under project conditions are summarized in Table 9. Under No Project conditions, the results show that three of the study intersections would operate at an unacceptable LOS measured against the City of Brisbane level of service guidelines. The unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F during the AM peak hour. The unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F during both the AM and PM peak hours. The unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F during the PM peak hour. The remaining study intersections would operate at an acceptable LOS.

Table A-10
No Project Condition Levels of Service

Intersection	Peak Hour	Background Ave. Delay	Background LOS	Project Conditions Ave. Delay	Project Conditions LOS	Incr. In Crit Delay	Incr. In Crit V/C
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	32.4	C	34.3	C	1.3	0.012
	PM	31.0	C	31.4	C	0.7	0.008
2. Alemany Blvd and Congdon St	AM	14.1	B	14.1	B	0.0	0.006
	PM	14.9	B	14.9	B	0.0	0.003
3. Alemany Blvd and Geneva Ave	AM	36.0	D	36.1	D	0.1	0.001
	PM	33.4	C	33.4	C	0.1	0.007
4. Mission St and Geneva Ave	AM	10.3	B	10.3	B	0.0	0.002
	PM	10.9	B	10.9	B	0.0	0.010
5. Bayshore Blvd and Geneva Ave	AM	16.4	B	16.4	B	0.1	0.004
	PM	18.2	B	18.4	B	0.0	0.023
6. Bayshore Blvd and Old County Road*	AM	20.4	C	22.7	C	4.9	0.059
	PM	22.1	C	23.0	C	0.7	0.016
7. Tunnel Ave and Lagoon Wy	AM	8.9	A	10.1	B	1.2	0.134
	PM	9.2	A	10.6	B	1.2	0.112
8. Sierra Point Pkwy and Lagoon Wy	AM	9.9	A	79.1	F	69.2	0.801
	PM	16.9	C	84.6	F	67.8	0.469
9. Sierra Point Pkwy and US 101 NB Ramps	AM	17.9	C	702.8	F	-	-
	PM	9.9	A	12.2	B	-	-
10. Sierra Point Pkwy and Shoreline Ct	AM	10.4	B	18.4	C	8.0	0.235
	PM	18.4	C	136.9	F	118.6	0.837

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

Project Signal Warrants

The peak-hour signal warrant was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of project peak-hour volumes. The analysis showed that under project conditions the intersection of Sierra Point Parkway/Shoreline Court would meet the signal warrant during the PM peak hour. The other three unsignalized study intersections do not meet the peak-hour volume warrant.

Project Freeway Segment Analysis

Project traffic volumes on freeway segments were established by adding to existing freeway volumes the estimated project trips on freeway segments. The results of the analysis are summarized in Table A-3. The results show that none of the directional freeway segments analyzed would operate at an unacceptable LOS F during at least one of the peak hours under project conditions. All of the analyzed freeway segments would operate at an acceptable LOS E or better during the AM and PM peak hours.

Table A-11
No Project Freeway Levels of Service

				Existing Plus Project Trips				Project Trips	
Freeway	Segment	Direction	Peak Hour	# of Lanes	Volume/a/	V/C	LOS	Volume	% Capacity
US 101	Harney Wy to Sierra Point Pkwy	SB	AM	4	9,134	0.99	E	478	5.2%
			PM	4	7,840	0.85	D	65	0.7%
US 101	Sierra Point Pkwy to Oyster Point Blvd	SB	AM	4	7,400	0.80	D	45	0.5%
			PM	4	7,714	0.84	D	301	3.3%
I - 280	Alemany Blvd to San Jose Ave	SB	AM	4	5,459	0.59	A	1	0.0%
			PM	4	8,659	0.94	E	8	0.1%
US 101	Oyster Point Blvd to Sierra Point Pkwy	NB	AM	4	7,844	0.85	D	360	3.9%
			PM	4	8,460	0.92	E	48	0.5%
US 101	Sierra Point Pkwy to Harney Wy	NB	AM	4	7,226	0.79	C	59	0.6%
			PM	4	7,991	0.87	D	398	4.3%
I - 280	San Jose Ave to Alemany Blvd	NB	AM	4	7,676	0.83	D	10	0.1%
			PM	4	5,689	0.62	B	1	0.0%

/a/ Source: Caltrans freeway count data.

Transit Impacts

Transit service in the project vicinity would be provided via Caltrain, BART, Light Rail, and several Samtrans operated bus routes. Assuming up to three percent transit mode share for the project equates to approximately 33 new transit riders during the AM peak commute period and 28 new transit riders during the PM peak period. These new riders easily could be accommodated by the available ridership capacity of the nearby bus and rail lines. Thus, no major improvements to the existing transit facilities would be necessary. However, Samtrans may consider adjusting the schedules for bus routes near the project site to accommodate any shift in ridership patterns.

Appendix C-2

Traffic Counts

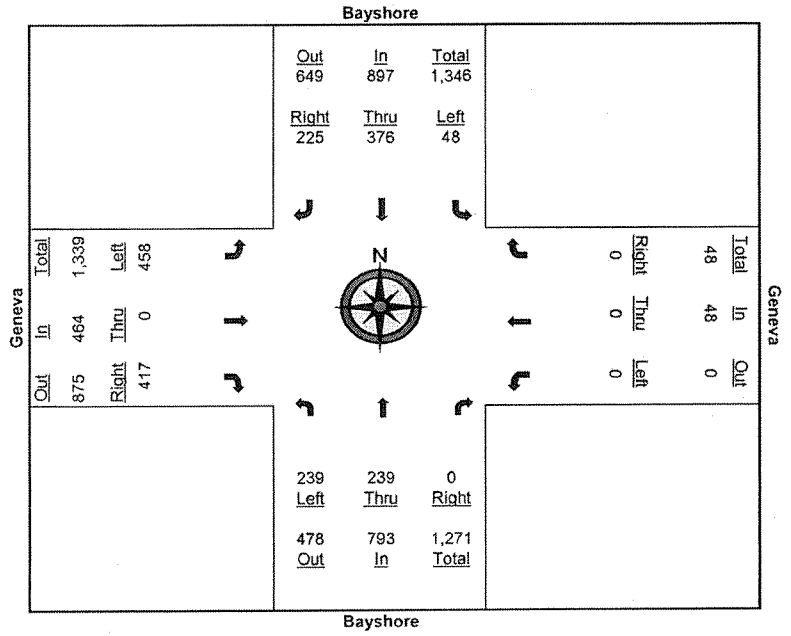
AM Peak-Hour Volume Count Worksheet

Date: 5/25/06
Counter: Alvan and Ngoc
Intersection Name: Bayshore Blvd and Geneva Avenue
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

	Bayshore North Approach				Geneva East Approach				Bayshore South Approach				Geneva West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	59	44	17	120	0	0	0	0	0	20	75	95	61	0	70	131
6:30	79	76	23	178	0	0	0	0	0	37	113	150	108	0	139	247
6:45	115	176	31	322	0	0	0	0	0	71	163	234	209	0	240	449
7:00	161	249	44	454	0	0	0	0	0	104	216	320	312	0	375	687
7:15	187	319	45	551	0	0	0	0	0	146	263	409	380	0	493	873
7:30	225	388	63	674	0	0	0	0	0	202	317	519	495	0	827	1,122
7:45	270	457	75	802	0	0	0	0	0	263	368	631	607	0	738	1,345
8:00	321	554	84	959	0	0	0	0	0	320	442	762	721	0	860	1,581
8:15	386	652	95	1,133	0	0	0	0	0	381	498	879	818	0	975	1,793
8:30	450	762	111	1,323	0	0	0	0	0	441	556	997	912	0	1,085	1,997
8:45	500	830	120	1,450	0	0	0	0	0	485	608	1,093	999	0	1,179	2,178
9:00	544	943	138	1,625	0	0	0	0	0	539	660	1,199	1,090	0	1,269	2,359

																	Hourly
Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Totals
6:00 - 7:00	161	249	44	454	0	0	0	0	0	104	216	320	312	0	375	687	1,461
6:15 - 7:15	128	275	28	431	0	0	0	0	0	126	188	314	319	0	423	742	1,487
6:30 - 7:30	146	310	40	496	0	0	0	0	0	165	204	369	367	0	488	875	1,740
6:45 - 7:45	155	281	44	480	0	0	0	0	0	192	205	397	398	0	498	896	1,773
7:00 - 8:00	160	305	40	505	0	0	0	0	0	216	226	442	409	0	485	894	1,841
7:15 - 8:15	199	333	50	582	0	0	0	0	0	235	235	470	438	0	482	920	1,972
7:30 - 8:30	225	376	48	649	0	0	0	0	0	239	239	478	417	0	458	875	2,002
7:45 - 8:45	230	373	45	648	0	0	0	0	0	222	240	462	392	0	441	833	1,943
8:00 - 9:00	223	389	54	686	0	0	0	0	0	219	218	437	369	0	409	778	1,881
Peak Volumes:	**225**	**376**	**48**	**649**	**0**	**0**	**0**	**0**	**0**	**239**	**239**	**478**	**417**	**0**	**458**	**875**	**2,002**



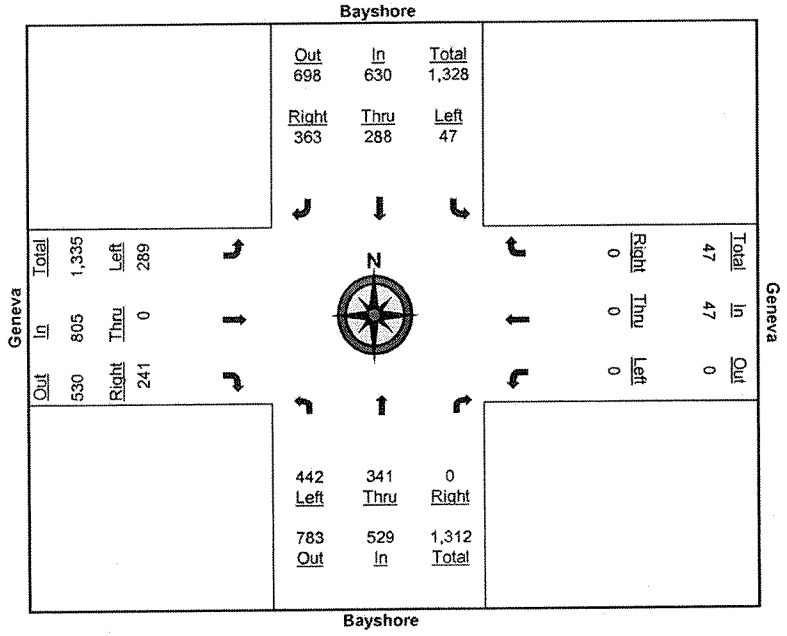
PM Peak-Hour Volume Count Worksheet

Date: 5/25/06
Counter: Alvan and Ngoc
Intersection Name: Bayshore Blvd and Geneva Avenue
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Bayshore North Approach				Geneva East Approach				Bayshore South Approach				Geneva West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	106	68	10	184	0	0	0	0	0	67	77	144	44	0	73	117
4:30	189	147	20	356	0	0	0	0	0	145	193	338	100	0	145	245
4:45	269	203	31	503	0	0	0	0	0	230	309	539	185	0	230	415
5:00	395	290	47	732	0	0	0	0	0	297	400	697	233	0	293	526
5:15	469	356	57	882	0	0	0	0	0	408	519	927	285	0	362	647
5:30	578	403	79	1,060	0	0	0	0	0	498	640	1,138	327	0	418	745
5:45	690	458	83	1,231	0	0	0	0	0	602	760	1,362	384	0	477	861
6:00	795	522	101	1,418	0	0	0	0	0	679	884	1,563	427	0	527	954
6:15	857	547	103	1,507	0	0	0	0	0	752	974	1,726	472	0	597	1,069
6:30	961	605	111	1,677	0	0	0	0	0	856	1,125	1,981	527	0	674	1,201
6:45	1,024	642	116	1,782	0	0	0	0	0	934	1,236	2,170	575	0	726	1,301
7:00	1,090	679	128	1,897	0	0	0	0	0	1,013	1,317	2,330	621	0	781	1,402

Peak Hour	Bayshore North Approach				Geneva East Approach				Bayshore South Approach				Geneva West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	395	290	47	732	0	0	0	0	0	297	400	697	233	0	293	526	1,955
4:15 - 5:15	363	288	47	698	0	0	0	0	0	341	442	783	241	0	289	530	2,011
4:30 - 5:30	389	256	59	704	0	0	0	0	0	353	447	800	227	0	273	500	2,004
4:45 - 5:45	421	255	52	728	0	0	0	0	0	372	451	823	199	0	247	446	1,997
5:00 - 6:00	400	232	54	686	0	0	0	0	0	382	484	866	194	0	234	428	1,980
5:15 - 6:15	388	191	46	625	0	0	0	0	0	344	455	799	187	0	235	422	1,846
5:30 - 6:30	383	202	32	617	0	0	0	0	0	358	485	843	200	0	256	456	1,916
5:45 - 6:45	334	184	33	551	0	0	0	0	0	332	476	808	191	0	249	440	1,799
6:00 - 7:00	295	157	27	479	0	0	0	0	0	334	433	767	194	0	254	448	1,694
Peak Volumes:	**363**	**288**	**47**	**698**	**0**	**0**	**0**	**0**	**0**	**341**	**442**	**783**	**241**	**0**	**289**	**530**	**2,011**



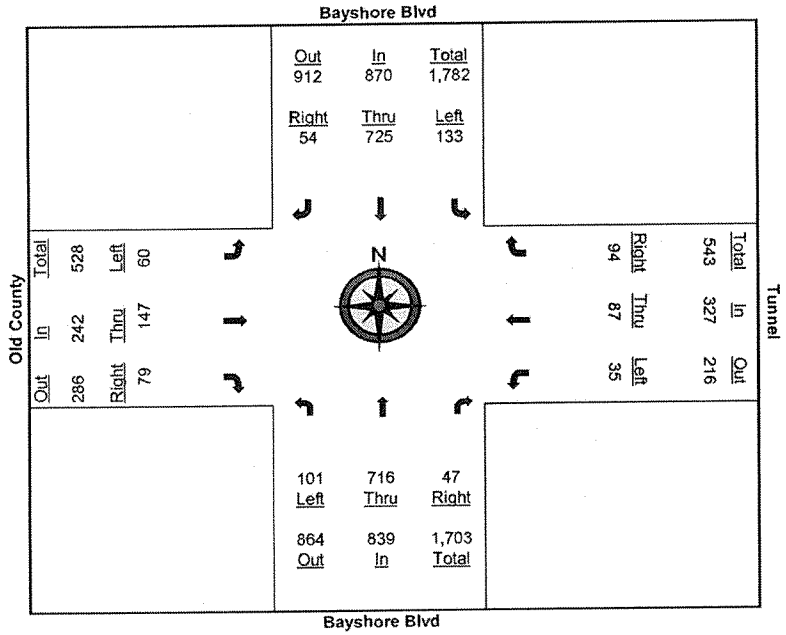
AM Peak-Hour Volume Count Worksheet

Date: 5/25/06
Counter: Patti and Kevin So
Intersection Name: Bayshore Blvd and Old County/Tunnel
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Bayshore Blvd North Approach				Tunnel East Approach				Bayshore Blvd South Approach				Old County West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	2	66	17	85	14	4	2	20	5	75	8	88	7	16	2	25
6:30	4	151	34	189	25	9	4	38	7	158	17	182	17	45	10	72
6:45	9	279	50	338	39	18	8	65	14	261	28	303	30	78	19	127
7:00	17	410	69	496	48	33	14	95	23	409	39	471	41	114	26	181
7:15	21	527	80	628	64	44	20	128	36	532	53	621	53	143	35	231
7:30	24	674	111	809	86	58	27	171	51	677	78	806	68	180	46	294
7:45	29	851	137	1,017	103	69	32	204	59	810	97	966	87	222	60	369
8:00	44	1,053	173	1,270	138	88	42	268	73	1,015	128	1,216	106	254	73	433
8:15	53	1,244	200	1,497	164	121	56	341	86	1,180	158	1,424	118	291	89	498
8:30	69	1,412	239	1,720	180	143	65	388	98	1,371	181	1,650	141	336	101	578
8:45	83	1,576	270	1,929	197	156	67	420	106	1,526	198	1,830	166	369	120	655
9:00	97	1,751	296	2,144	220	169	71	460	125	1,684	218	2,027	184	398	145	727

Peak Hour	Bayshore Blvd North Approach				Tunnel East Approach				Bayshore Blvd South Approach				Old County West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
6:00 - 7:00	17	410	69	496	48	33	14	95	23	409	39	471	41	114	26	181	1,243
6:15 - 7:15	19	461	63	543	50	40	18	108	31	457	45	533	46	127	33	206	1,390
6:30 - 7:30	20	523	77	620	61	49	23	133	44	519	61	624	51	135	36	222	1,599
6:45 - 7:45	20	572	87	679	64	51	24	139	45	549	69	663	57	144	41	242	1,723
7:00 - 8:00	27	643	104	774	90	55	28	173	50	606	89	745	65	140	47	252	1,944
7:15 - 8:15	32	717	120	869	100	77	36	213	50	648	105	803	65	148	54	267	2,152
7:30 - 8:30	45	738	128	911	94	85	38	217	47	694	103	844	73	156	55	284	2,256
7:45 - 8:45	54	725	133	912	94	87	35	216	47	716	101	864	79	147	60	286	2,278
8:00 - 9:00	53	698	123	874	82	81	29	192	52	669	90	811	78	144	72	294	2,171
Peak Volumes:	**54**	**725**	**133**	**912**	**94**	**87**	**35**	**216**	**47**	**716**	**101**	**864**	**79**	**147**	**60**	**286**	**2,278**



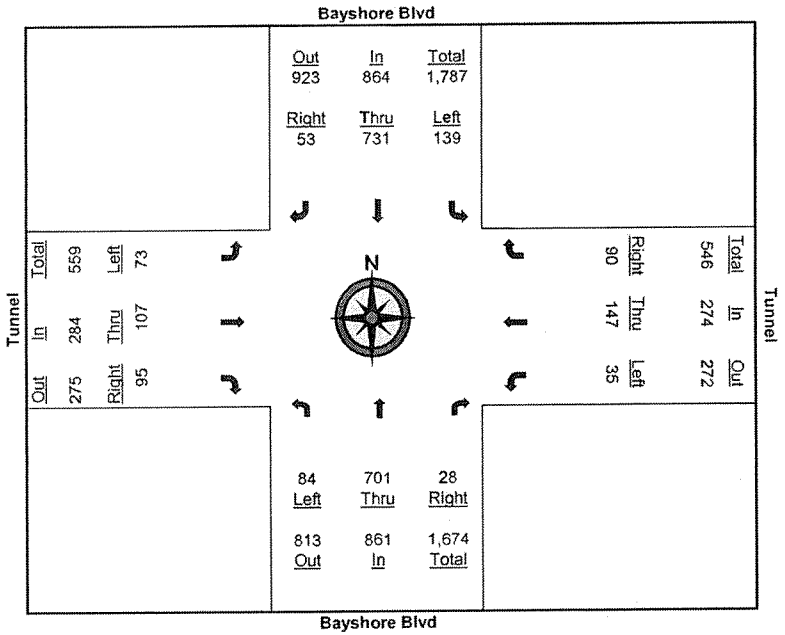
PM Peak-Hour Volume Count Worksheet

Date: 5/25/06
Counter: Alex and Alia
Intersection Name: Bayshore Blvd and Old County/Tunnel
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Bayshore Blvd North Approach				Tunnel East Approach				Bayshore Blvd South Approach				Tunnel West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	16	133	29	178	13	32	9	54	2	104	9	115	18	15	12	45
4:30	32	260	47	339	34	63	16	113	5	271	38	314	29	34	30	93
4:45	46	439	80	565	63	98	20	181	10	432	61	503	54	54	45	153
5:00	63	630	113	806	81	140	32	253	18	594	81	693	83	78	67	228
5:15	77	840	149	1,066	107	169	40	316	21	762	104	887	115	108	88	311
5:30	89	991	184	1,264	126	201	48	375	31	929	126	1,086	136	127	101	364
5:45	99	1,170	219	1,488	153	245	55	453	38	1,133	145	1,316	149	161	118	428
6:00	114	1,293	241	1,648	171	277	59	507	42	1,273	160	1,475	161	189	137	487
6:15	124	1,412	259	1,795	185	303	64	552	44	1,482	180	1,706	175	204	148	527
6:30	134	1,539	285	1,958	200	328	78	606	47	1,669	202	1,918	185	226	162	573
6:45	144	1,655	295	2,094	209	363	82	654	51	1,830	214	2,095	200	239	180	619
7:00	158	1,746	315	2,219	217	388	83	688	53	1,981	232	2,266	213	255	191	659

Peak Hour	Bayshore Blvd North Approach				Tunnel East Approach				Bayshore Blvd South Approach				Tunnel West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	63	630	113	806	81	140	32	253	18	594	81	693	83	78	67	228	1,980
4:15 - 5:15	61	707	120	888	94	137	31	262	19	658	95	772	97	93	76	266	2,188
4:30 - 5:30	57	731	137	925	92	138	32	262	26	658	88	772	107	93	71	271	2,230
4:45 - 5:45	53	731	139	923	90	147	35	272	28	701	84	813	95	107	73	275	2,283
5:00 - 6:00	51	663	128	842	90	137	27	254	24	679	79	782	78	111	70	259	2,137
5:15 - 6:15	47	572	110	729	78	134	24	236	23	720	76	819	60	96	60	216	2,000
5:30 - 6:30	45	548	101	694	74	127	30	231	16	740	76	832	49	99	61	209	1,966
5:45 - 6:45	45	485	76	606	56	118	27	201	13	697	69	779	51	78	62	191	1,777
6:00 - 7:00	44	453	74	571	46	111	24	181	11	708	72	791	52	66	54	172	1,715
Peak Volumes:	**53**	**731**	**139**	**923**	**90**	**147**	**35**	**272**	**28**	**701**	**84**	**813**	**95**	**107**	**73**	**275**	**2,283**



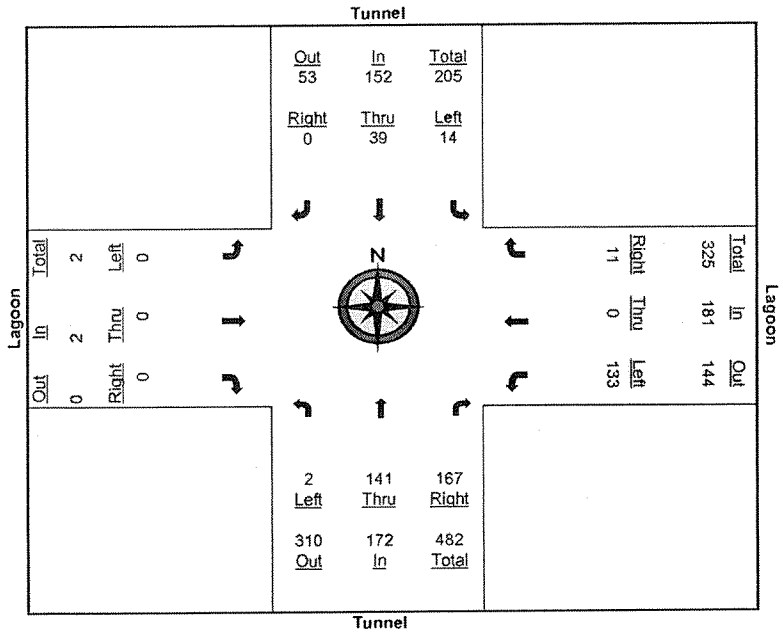
AM Peak-Hour Volume Count Worksheet

Date: 5/25/06
Counter: Kevin and Joy
Intersection Name: Tunnell Avenue and Lagoon Way
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Tunnel North Approach				Lagoon East Approach				Tunnel South Approach				Lagoon West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	0	0	2	2	1	0	13	14	12	20	0	32	0	0	0	0
6:30	0	2	3	5	6	0	25	31	25	44	0	69	0	0	0	0
6:45	0	3	5	8	11	0	47	58	54	77	4	135	0	0	0	0
7:00	0	7	9	16	12	1	67	80	77	112	7	196	0	0	0	0
7:15	0	14	13	27	13	1	92	106	95	145	7	247	0	0	0	0
7:30	0	17	19	36	15	1	116	132	137	189	7	333	0	0	0	0
7:45	0	23	22	45	21	1	142	164	177	226	7	410	0	0	0	0
8:00	0	34	25	59	21	1	188	210	214	263	7	484	0	0	0	0
8:15	0	42	29	71	24	1	223	248	253	296	9	558	0	0	0	0
8:30	0	56	33	89	26	1	249	276	304	330	9	643	0	0	0	0
8:45	0	64	37	101	32	2	264	298	347	360	11	718	0	0	0	0
9:00	0	77	39	118	33	2	285	320	367	383	12	762	0	0	0	0

Peak Hour	Tunnel North Approach				Lagoon East Approach				Tunnel South Approach				Lagoon West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
6:00 - 7:00	0	7	9	16	12	1	67	80	77	112	7	196	0	0	0	0	292
6:15 - 7:15	0	14	11	25	12	1	79	92	83	125	7	215	0	0	0	0	332
6:30 - 7:30	0	15	16	31	9	1	91	101	112	145	7	264	0	0	0	0	396
6:45 - 7:45	0	20	17	37	10	1	95	106	123	149	3	275	0	0	0	0	418
7:00 - 8:00	0	27	16	43	9	0	121	130	137	151	0	288	0	0	0	0	461
7:15 - 8:15	0	28	16	44	11	0	131	142	158	151	2	311	0	0	0	0	497
7:30 - 8:30	0	39	14	53	11	0	133	144	167	141	2	310	0	0	0	0	507
7:45 - 8:45	0	41	15	56	11	1	122	134	170	134	4	308	0	0	0	0	498
8:00 - 9:00	0	43	14	57	12	1	97	110	153	120	5	278	0	0	0	0	445
Peak Volumes:	**0**	**39**	**14**	**53**	**11**	**0**	**133**	**144**	**167**	**141**	**2**	**310**	**0**	**0**	**0**	**0**	507



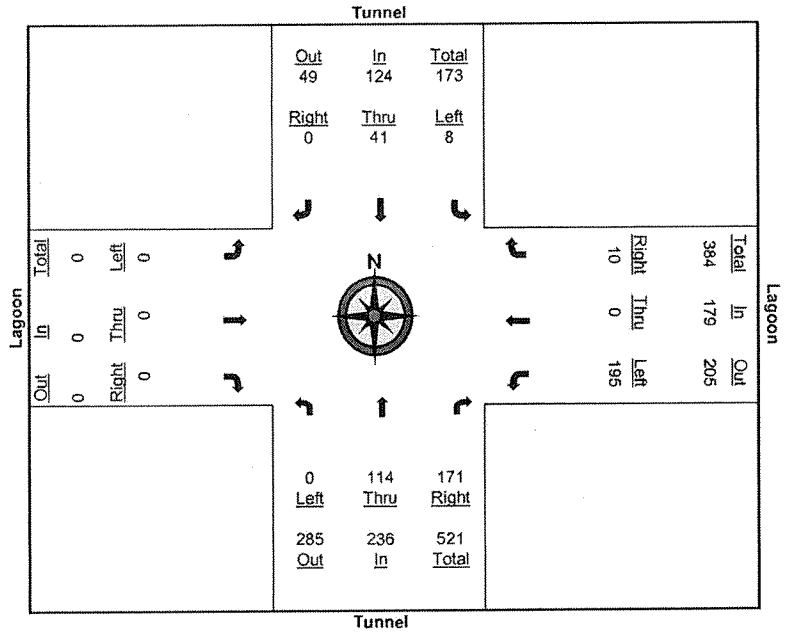
PM Peak-Hour Volume Count Worksheet

Date: 5/25/06
Counter: Kevin and Joy
Intersection Name: Tunnell Avenue and Lagoon Way
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Tunnel North Approach				Lagoon East Approach				Tunnel South Approach				Lagoon West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	2	2	4	2	0	28	30	20	12	0	32	0	0	0	0
4:30	0	15	5	20	6	0	76	82	47	29	0	76	0	0	0	0
4:45	0	35	8	43	8	0	128	136	91	42	0	133	0	0	0	0
5:00	0	38	8	46	10	0	177	187	154	99	0	253	0	0	0	0
5:15	0	43	10	53	12	0	223	235	191	126	0	317	0	0	0	0
5:30	0	48	10	58	15	0	265	280	208	137	0	345	0	0	0	0
5:45	0	58	11	69	17	0	317	334	225	149	0	374	0	0	0	0
6:00	0	63	12	75	19	1	354	374	244	163	0	407	0	0	0	0
6:15	0	67	13	80	21	1	391	413	263	177	0	440	0	0	0	0
6:30	1	72	16	89	22	1	445	468	289	191	0	480	0	0	0	0
6:45	1	79	17	97	25	1	482	508	306	208	0	514	0	0	0	0
7:00	1	79	18	98	26	1	505	532	318	215	0	533	0	0	0	0

Peak Hour	Tunnel North Approach				Lagoon East Approach				Tunnel South Approach				Lagoon West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	0	38	8	46	10	0	177	187	154	99	0	253	0	0	0	0	486
4:15 - 5:15	0	41	8	49	10	0	195	205	171	114	0	285	0	0	0	0	539
4:30 - 5:30	0	33	5	38	9	0	189	198	161	108	0	269	0	0	0	0	505
4:45 - 5:45	0	23	3	26	9	0	189	198	134	107	0	241	0	0	0	0	465
5:00 - 6:00	0	25	4	29	9	1	177	187	90	64	0	154	0	0	0	0	370
5:15 - 6:15	0	24	3	27	9	1	168	178	72	51	0	123	0	0	0	0	328
5:30 - 6:30	1	24	6	31	7	1	180	188	81	54	0	135	0	0	0	0	354
5:45 - 6:45	1	21	6	28	8	1	165	174	81	59	0	140	0	0	0	0	342
6:00 - 7:00	1	16	6	23	7	0	151	158	74	52	0	126	0	0	0	0	307
Peak Volumes:	0	41	8	49	10	0	195	205	171	114	0	285	0	0	0	0	539



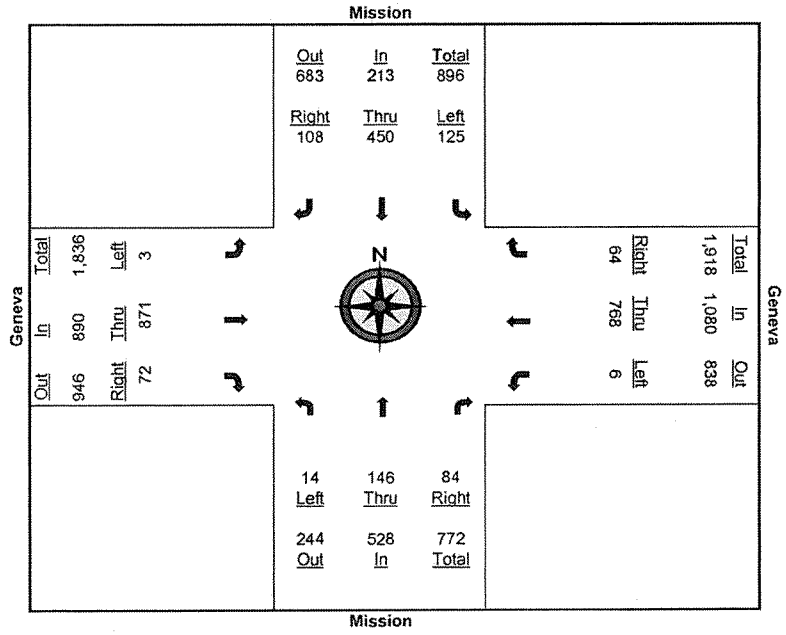
AM Peak-Hour Volume Count Worksheet

Date: 6/6/06
Counter: Alvan and Ngoc
Intersection Name: Mission Street and Geneva Ave
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

	Mission				Geneva				Mission				Geneva			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	7	21	28	56	6	43	1	50	10	20	1	31	9	64	0	73
6:30	20	60	48	128	17	119	2	138	31	49	3	83	16	164	0	180
6:45	28	101	78	207	23	210	2	235	42	67	7	116	23	299	0	322
7:00	43	147	107	297	39	287	2	328	62	94	10	166	32	425	0	457
7:15	55	210	139	404	44	380	3	427	81	114	11	206	48	639	0	687
7:30	82	300	176	558	62	546	6	614	98	159	14	271	70	882	1	953
7:45	107	439	197	743	79	745	7	831	125	192	19	336	87	1,108	2	1,197
8:00	151	597	232	980	103	1,055	8	1,166	146	240	24	410	104	1,296	3	1,403
8:15	157	623	241	1,021	107	1,123	9	1,239	183	301	36	520	116	1,533	3	1,652
8:30	170	684	257	1,111	117	1,225	9	1,351	212	385	42	639	129	1,755	5	1,889
8:45	186	750	294	1,230	129	1,343	11	1,483	240	433	53	726	150	1,939	6	2,095
9:00	197	795	312	1,304	135	1,459	12	1,606	274	502	57	833	168	2,103	6	2,277

																	Hourly
Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Totals
6:00 - 7:00	43	147	107	297	39	287	2	328	62	94	10	166	32	425	0	457	1,248
6:15 - 7:15	48	189	111	348	38	337	2	377	71	94	10	175	39	575	0	614	1,514
6:30 - 7:30	62	240	128	430	45	427	4	476	67	110	11	188	54	718	1	773	1,867
6:45 - 7:45	79	338	119	536	56	535	5	596	83	125	12	220	64	809	2	875	2,227
7:00 - 8:00	108	450	125	683	64	768	6	838	84	146	14	244	72	871	3	946	2,711
7:15 - 8:15	102	413	102	617	63	743	6	812	102	187	25	314	68	894	3	965	2,708
7:30 - 8:30	88	384	81	553	55	679	3	737	114	226	28	368	59	873	4	936	2,594
7:45 - 8:45	79	311	97	487	50	598	4	652	115	241	34	390	63	831	4	898	2,427
8:00 - 9:00	46	198	80	324	32	404	4	440	128	262	33	423	64	807	3	874	2,061
Peak Volumes:	**108**	**450**	**125**	**683**	**64**	**768**	**6**	**838**	**84**	**146**	**14**	**244**	**72**	**871**	**3**	**946**	**2,711**



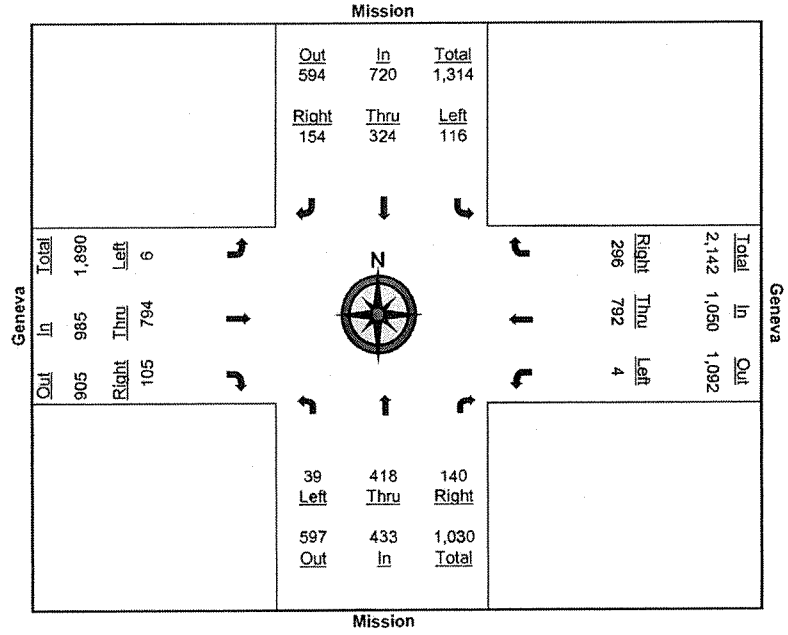
PM Peak-Hour Volume Count Worksheet

Date: 6/6/06
Counter: Alvan and Ngoc
Intersection Name: Mission Street and Geneva Ave
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Mission North Approach				Geneva East Approach				Mission South Approach				Geneva West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	20	78	35	133	30	151	1	182	20	79	17	116	22	103	1	126
4:30	47	181	58	286	61	380	2	443	55	180	32	267	51	285	1	337
4:45	66	233	73	372	86	502	2	590	100	294	52	446	85	507	2	594
5:00	90	299	91	480	108	661	5	774	130	392	60	582	109	632	2	743
5:15	106	357	103	566	147	848	9	1,004	167	493	67	727	132	840	4	976
5:30	127	429	125	681	188	1,030	9	1,227	199	589	74	862	156	1,026	6	1,188
5:45	141	492	139	772	224	1,265	11	1,500	235	691	87	1,013	180	1,232	7	1,419
6:00	163	545	146	854	315	1,526	14	1,855	281	783	95	1,159	200	1,421	8	1,629
6:15	187	602	162	951	401	1,768	15	2,184	314	890	103	1,307	231	1,639	10	1,880
6:30	201	711	183	1,095	490	1,902	17	2,409	345	994	117	1,456	254	1,811	11	2,076
6:45	269	796	202	1,267	524	2,109	18	2,651	391	1,091	126	1,608	281	2,021	12	2,314
7:00	317	869	262	1,448	611	2,318	18	2,947	421	1,201	134	1,756	305	2,215	14	2,534

Peak Hour	Mission North Approach				Geneva East Approach				Mission South Approach				Geneva West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	90	299	91	480	108	661	5	774	130	392	60	582	109	632	2	743	2,579
4:15 - 5:15	86	279	68	433	117	697	8	822	147	414	50	611	110	737	3	850	2,716
4:30 - 5:30	80	248	67	395	127	650	7	784	144	409	42	595	105	741	5	851	2,625
4:45 - 5:45	75	259	66	400	138	763	9	910	135	397	35	567	95	725	5	825	2,702
5:00 - 6:00	73	246	55	374	207	865	9	1,081	151	391	35	577	91	789	6	886	2,918
5:15 - 6:15	81	245	59	385	254	920	6	1,180	147	397	36	580	99	799	6	904	3,049
5:30 - 6:30	74	282	58	414	302	872	8	1,182	146	405	43	594	98	785	5	888	3,078
5:45 - 6:45	128	304	63	495	300	844	7	1,151	156	400	39	595	101	789	5	895	3,136
6:00 - 7:00	154	324	116	594	296	792	4	1,092	140	418	39	597	105	794	6	905	3,188
Peak Volumes:	**154**	**324**	**116**	**594**	**296**	**792**	**4**	**1,092**	**140**	**418**	**39**	**597**	**105**	**794**	**6**	**905**	**3,188**



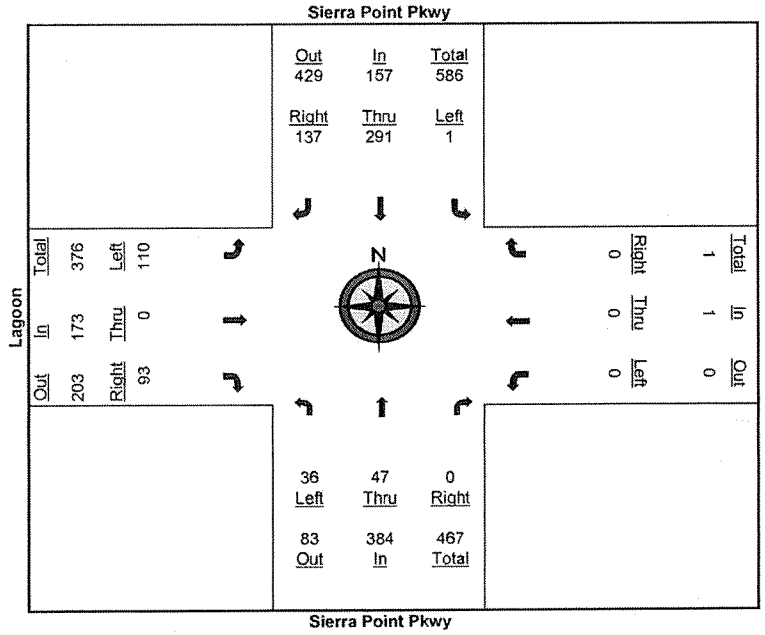
AM Peak-Hour Volume Count Worksheet

Date: 6/6/06
Counter: Kevin So and Keith
ntersection Name: Sierrra Point Pkwy and Lagoon Way
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

	Sierra Point Pkwy								Sierra Point Pkwy				Lagoon			
	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	7	10	0	17	0	0	0	0	0	7	14	21	3	0	7	10
6:30	28	27	0	55	0	0	0	0	0	11	20	31	5	0	18	23
6:45	48	36	0	84	0	0	0	0	0	19	25	44	8	0	34	42
7:00	78	59	0	137	0	0	0	0	0	26	31	57	19	0	47	66
7:15	93	90	0	183	0	0	0	0	0	33	35	68	33	0	67	100
7:30	177	133	0	310	0	0	0	0	0	43	40	83	47	0	84	131
7:45	168	177	0	345	0	0	0	0	0	61	50	111	71	0	124	195
8:00	217	251	1	469	0	0	0	0	0	72	61	133	91	0	151	242
8:15	249	295	1	545	0	0	0	0	0	84	72	156	114	0	174	288
8:30	281	367	1	649	0	0	0	0	0	97	80	177	141	0	199	340
8:45	305	468	1	774	0	0	0	0	0	108	86	194	164	0	234	398
9:00	317	521	1	839	0	0	0	0	0	113	96	209	172	0	243	415

																	Hourly
Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Totals
6:00 - 7:00	78	59	0	137	0	0	0	0	0	26	31	57	19	0	47	66	260
6:15 - 7:15	86	80	0	166	0	0	0	0	0	26	21	47	30	0	60	90	303
6:30 - 7:30	149	106	0	255	0	0	0	0	0	32	20	52	42	0	66	108	415
6:45 - 7:45	120	141	0	261	0	0	0	0	0	42	25	67	63	0	90	153	481
7:00 - 8:00	139	192	1	332	0	0	0	0	0	46	30	76	72	0	104	176	584
7:15 - 8:15	156	205	1	362	0	0	0	0	0	51	37	88	81	0	107	188	638
7:30 - 8:30	104	234	1	339	0	0	0	0	0	54	40	94	94	0	115	209	642
7:45 - 8:45	137	291	1	429	0	0	0	0	0	47	36	83	93	0	110	203	715
8:00 - 9:00	100	270	0	370	0	0	0	0	0	41	35	76	81	0	92	173	619
Peak Volumes:	**137**	**291**	**1**	**429**	**0**	**0**	**0**	**0**		**47**	**36**	**83**	**93**	**0**	**110**	**203**	**715**



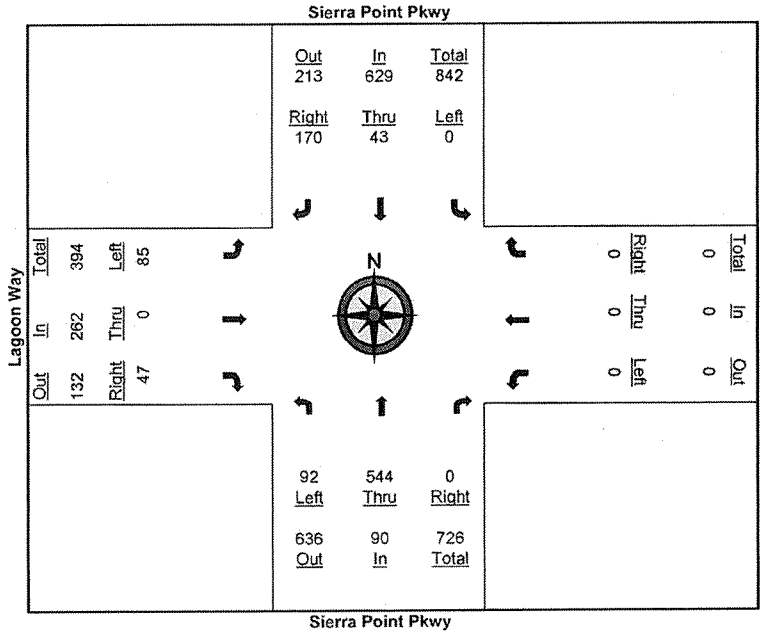
PM Peak-Hour Volume Count Worksheet

Date: 6/6/06
Counter: Kevin So and Keith
ntersection Name: Sierra Point Pkwy and Lagoon Way
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Sierra Point Pkwy North Approach				East Approach				Sierra Point Pkwy South Approach				Lagoon Way West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	42	10	0	52	0	0	0	0	0	53	8	61	8	0	32	40
4:30	72	29	0	101	0	0	0	0	0	101	13	114	15	0	56	71
4:45	115	42	0	157	0	0	0	0	0	180	24	204	25	0	86	111
5:00	157	54	0	211	0	0	0	0	0	249	34	283	41	0	108	149
5:15	200	68	0	268	0	0	0	0	0	425	53	478	64	0	139	203
5:30	239	74	0	313	0	0	0	0	0	565	74	639	75	0	159	234
5:45	276	88	0	364	0	0	0	0	0	677	96	773	83	0	178	261
6:00	327	97	0	424	0	0	0	0	0	793	126	919	88	0	193	281
6:15	365	111	0	476	0	0	0	0	0	923	136	1,059	97	0	214	311
6:30	406	114	0	520	0	0	0	0	0	1,027	152	1,179	100	0	240	340
6:45	435	122	0	557	0	0	0	0	0	1,101	163	1,264	109	0	257	366
7:00	459	124	0	583	0	0	0	0	0	1,149	172	1,321	114	0	273	387

Peak Hour	Sierra Point Pkwy North Approach				East Approach				Sierra Point Pkwy South Approach				Lagoon Way West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	157	54	0	211	0	0	0	0	0	249	34	283	41	0	108	149	643
4:15 - 5:15	158	58	0	216	0	0	0	0	0	372	45	417	56	0	107	163	796
4:30 - 5:30	167	45	0	212	0	0	0	0	0	464	61	525	60	0	103	163	900
4:45 - 5:45	161	46	0	207	0	0	0	0	0	497	72	569	58	0	92	150	926
5:00 - 6:00	170	43	0	213	0	0	0	0	0	544	92	636	47	0	85	132	981
5:15 - 6:15	165	43	0	208	0	0	0	0	0	498	83	581	33	0	75	108	897
5:30 - 6:30	167	40	0	207	0	0	0	0	0	462	78	540	25	0	81	106	853
5:45 - 6:45	159	34	0	193	0	0	0	0	0	424	67	491	26	0	79	105	789
6:00 - 7:00	132	27	0	159	0	0	0	0	0	356	46	402	26	0	80	106	667
Peak Volumes:	**170**	**43**	**0**	**213**	**0**	**0**	**0**	**0**	**0**	**544**	**92**	**636**	**47**	**0**	**85**	**132**	**981**



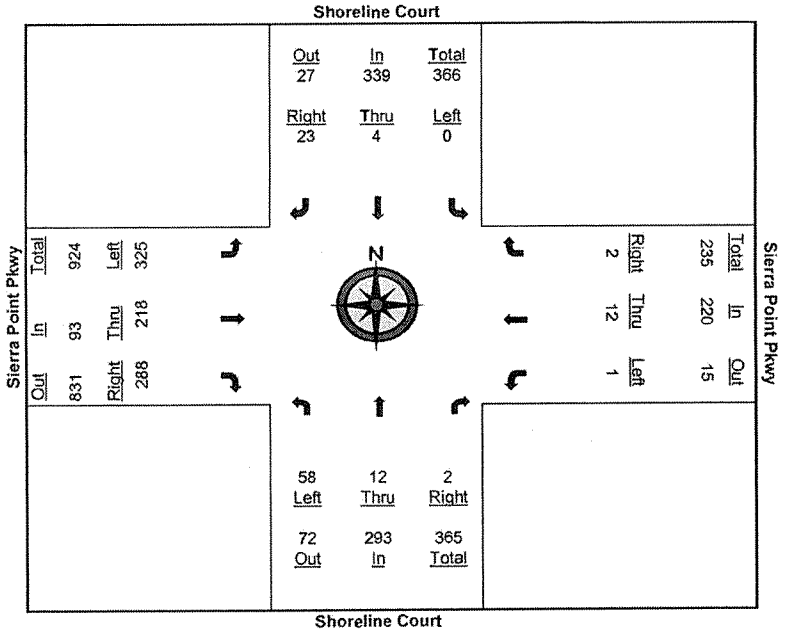
AM Peak-Hour Volume Count Worksheet

Date: 6/6/06
Counter: Kevin and Kushal
Intersection Name: Sierra Point Blvd and Shoreline Ct.
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Shoreline Court North Approach				Sierra Point Pkwy East Approach				Shoreline Court South Approach				Sierra Point Pkwy West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	1	0	0	1	0	0	0	0	0	0	5	5	5	3	4	12
6:30	2	0	0	2	0	1	0	1	0	1	12	13	14	13	11	38
6:45	2	0	0	2	0	1	0	1	2	2	24	28	27	21	20	68
7:00	3	0	0	3	0	5	0	5	2	3	31	36	56	27	42	125
7:15	5	0	0	5	0	8	1	9	2	4	35	41	81	41	58	180
7:30	12	0	0	12	0	9	1	10	2	5	44	51	110	64	98	272
7:45	16	0	0	16	0	14	1	15	2	7	63	72	161	105	154	420
8:00	21	0	0	21	0	14	1	15	2	9	87	98	222	149	238	609
8:15	27	1	0	28	1	16	1	18	4	12	96	112	282	195	304	781
8:30	32	4	0	36	1	21	2	24	4	12	115	131	340	242	366	948
8:45	39	4	0	43	2	26	2	30	4	19	121	144	449	323	479	1,251
9:00	41	6	0	46	2	28	3	33	6	19	138	163	523	386	559	1,468

Peak Hour	Shoreline Court North Approach				Sierra Point Pkwy East Approach				Shoreline Court South Approach				Sierra Point Pkwy West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
6:00 - 7:00	3	0	0	3	0	5	0	5	2	3	31	36	56	27	42	125	169
6:15 - 7:15	4	0	0	4	0	8	1	9	2	4	30	36	76	38	54	168	217
6:30 - 7:30	10	0	0	10	0	8	1	9	2	4	32	38	96	51	87	234	291
6:45 - 7:45	14	0	0	14	0	13	1	14	0	5	39	44	134	84	134	352	424
7:00 - 8:00	18	0	0	18	0	9	1	10	0	6	56	62	166	122	196	484	574
7:15 - 8:15	22	1	0	23	1	8	0	9	2	8	61	71	201	154	246	601	704
7:30 - 8:30	20	4	0	24	1	12	1	14	2	7	71	80	230	178	268	676	794
7:45 - 8:45	23	4	0	27	2	12	1	15	2	12	58	72	288	218	325	831	945
8:00 - 9:00	20	5	0	25	2	14	2	18	4	10	51	65	301	237	321	859	967
Peak Volumes:	**23**	**4**	**0**	27	2	12	1	**15**	**2**	**12**	58	72	288	218	325	831	**945**



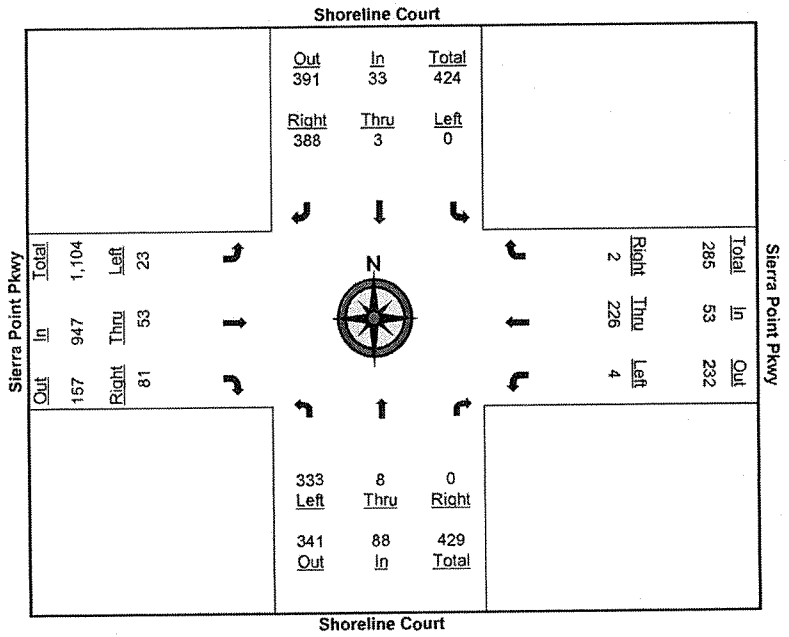
PM Peak-Hour Volume Count Worksheet

Date: 6/6/06
Counter: Kevin and Alex
Intersection Name: Sierra Point Blvd and Shoreline Ct.
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Shoreline Court North Approach				Sierra Point Pkwy East Approach				Shoreline Court South Approach				Sierra Point Pkwy West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	16	0	0	16	0	20	0	20	1	0	23	24	8	10	1	19
4:30	37	1	0	38	0	40	2	42	2	2	63	67	33	25	6	64
4:45	78	1	0	79	0	60	2	62	5	5	113	123	49	37	15	101
5:00	138	3	0	141	0	100	3	103	7	8	176	191	64	59	23	146
5:15	258	5	0	263	0	178	3	181	7	12	286	305	86	77	29	192
5:30	336	5	0	341	0	220	3	223	7	14	353	374	101	90	34	225
5:45	422	5	0	427	1	267	4	272	7	15	434	456	132	101	39	272
6:00	526	6	0	532	2	326	7	335	7	16	509	532	145	112	46	303
6:15	578	6	0	584	2	394	8	404	7	17	572	596	170	122	52	344
6:30	629	9	0	638	2	427	8	437	7	17	630	654	185	130	56	371
6:45	672	11	0	683	2	459	8	469	7	18	686	711	198	136	59	393
7:00	701	11	0	712	2	490	8	500	7	18	716	741	208	139	63	410

Peak Hour	Shoreline Court North Approach				Sierra Point Pkwy East Approach				Shoreline Court South Approach				Sierra Point Pkwy West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	138	3	0	141	0	100	3	103	7	8	176	191	64	59	23	146	581
4:15 - 5:15	242	5	0	247	0	158	3	161	6	12	263	281	78	67	28	173	862
4:30 - 5:30	299	4	0	303	0	180	1	181	5	12	290	307	68	65	28	161	952
4:45 - 5:45	344	4	0	348	1	207	2	210	2	10	321	333	83	64	24	171	1,062
5:00 - 6:00	388	3	0	391	2	226	4	232	0	8	333	341	81	53	23	157	1,121
5:15 - 6:15	320	1	0	321	2	216	5	223	0	5	286	291	84	45	23	152	987
5:30 - 6:30	293	4	0	297	2	207	5	214	0	3	277	280	84	40	22	146	937
5:45 - 6:45	250	6	0	256	1	192	4	197	0	3	252	255	66	35	20	121	829
6:00 - 7:00	175	5	0	180	0	164	1	165	0	2	207	209	63	27	17	107	661
Peak Volumes:	**388**	**3**	**0**	**391**	**2**	**226**	**4**	**232**	**0**	**8**	**333**	**341**	**81**	**53**	**23**	**157**	**1,121**



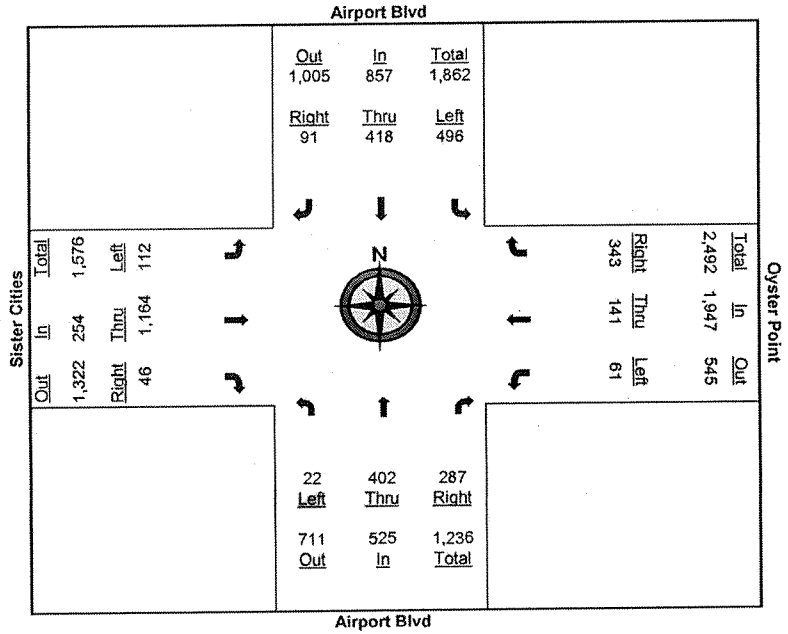
AM Peak-Hour Volume Count Worksheet

Date: 6/7/06
Counter: Alvan and Ngoc
Intersection Name: Airport Blvd and Oyster Point/Sister Cities
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Airport Blvd North Approach				Oyster Point East Approach				Airport Blvd South Approach				Sister Cities West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	5	17	16	38	0	3	6	9	36	7	1	44	7	73	1	81
6:30	11	39	35	85	0	23	14	37	91	12	3	106	8	182	7	197
6:45	15	66	68	149	1	42	24	67	148	35	5	188	11	305	11	327
7:00	28	126	139	293	26	81	51	158	206	50	7	263	17	462	20	499
7:15	41	153	168	362	54	101	56	211	281	78	12	371	22	677	35	734
7:30	72	228	257	557	167	124	71	362	347	157	18	522	29	894	57	980
7:45	87	341	404	832	265	161	87	513	413	272	21	706	34	1,174	77	1,285
8:00	114	438	506	1,058	337	202	102	641	490	375	28	893	59	1,487	114	1,660
8:15	132	571	664	1,367	397	242	117	756	568	480	34	1,082	68	1,841	147	2,056
8:30	143	665	802	1,610	427	274	132	833	608	559	37	1,204	77	2,054	164	2,295
8:45	156	775	977	1,908	466	294	151	911	651	652	46	1,349	110	2,317	177	2,604
9:00	169	869	1,089	2,127	513	318	173	1,004	704	769	57	1,530	132	2,621	194	2,947

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Hourly Totals
6:00 - 7:00	28	126	139	293	26	81	51	158	206	50	7	263	17	462	20	499	1,213
6:15 - 7:15	36	136	152	324	54	98	50	202	245	71	11	327	15	604	34	653	1,506
6:30 - 7:30	61	189	222	472	167	101	57	325	256	145	15	416	21	712	50	783	1,996
6:45 - 7:45	72	275	336	683	264	119	63	446	265	237	16	518	23	869	66	958	2,605
7:00 - 8:00	86	312	367	765	311	121	51	483	284	325	21	630	42	1,025	94	1,161	3,039
7:15 - 8:15	91	418	496	1,005	343	141	61	545	287	402	22	711	46	1,164	112	1,322	3,583
7:30 - 8:30	71	437	545	1,053	260	150	61	471	261	402	19	682	48	1,160	107	1,315	3,521
7:45 - 8:45	69	434	573	1,076	201	133	64	398	238	380	25	643	76	1,143	100	1,319	3,436
8:00 - 9:00	55	431	583	1,069	176	116	71	363	214	394	29	637	73	1,134	80	1,287	3,356
Peak Volumes:	**91**	**418**	**496**	**1,005**	**343**	**141**	**61**	**545**	**287**	**402**	**22**	**711**	**46**	**1,164**	**112**	**1,322**	**3,583**



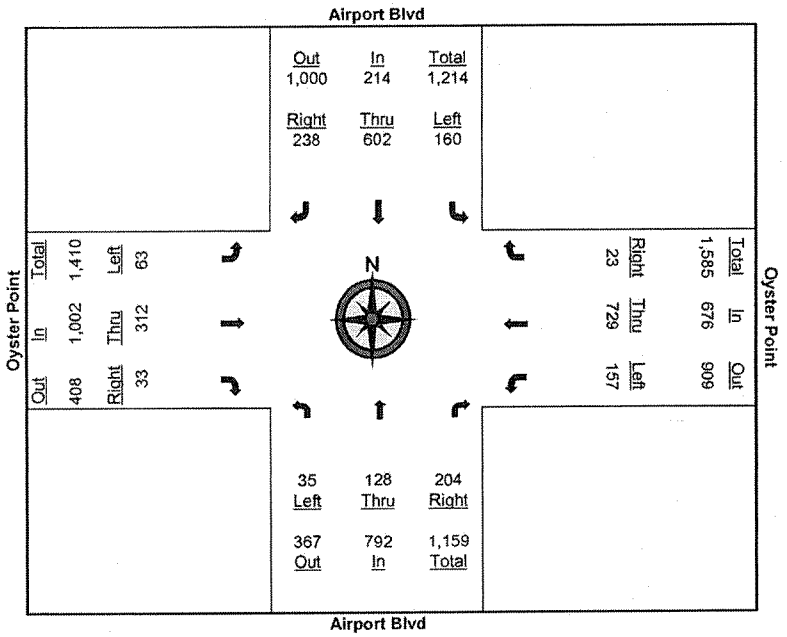
PM Peak-Hour Volume Count Worksheet

Date: 6/7/06
Counter: Alvan and Ngoc
Intersection Name: Airport Blvd and Oyster Point/Sister Cities
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Airport Blvd North Approach				Oyster Point East Approach				Airport Blvd South Approach				Oyster Point West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	58	83	25	166	2	95	34	131	53	31	4	88	16	72	16	104
4:30	105	142	49	296	9	198	68	275	98	57	9	164	24	150	23	197
4:45	155	208	82	445	12	325	110	447	143	78	17	238	36	217	41	294
5:00	226	296	110	632	15	480	140	635	181	102	21	304	43	307	64	414
5:15	297	450	152	899	19	652	186	857	248	143	42	433	58	393	83	534
5:30	327	602	190	1,119	28	829	220	1,077	292	172	49	513	62	459	90	611
5:45	393	810	242	1,445	35	1,054	267	1,356	347	206	52	605	69	529	104	702
6:00	429	927	272	1,628	38	1,154	296	1,488	389	244	55	688	76	586	108	770
6:15	456	1,025	294	1,775	47	1,257	317	1,621	424	273	57	754	86	654	131	871
6:30	493	1,117	321	1,931	49	1,381	348	1,778	472	309	68	849	95	729	147	971
6:45	533	1,174	334	2,041	53	1,470	383	1,906	507	332	79	918	102	796	162	1,060
7:00	581	1,223	358	2,162	58	1,567	418	2,043	532	340	89	961	112	849	167	1,128

Peak Hour	Airport Blvd North Approach				Oyster Point East Approach				Airport Blvd South Approach				Oyster Point West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	226	296	110	832	15	480	140	635	181	102	21	304	43	307	64	414	1,985
4:15 - 5:15	239	367	127	733	17	557	152	728	195	112	38	345	42	321	67	430	2,234
4:30 - 5:30	222	460	141	823	19	631	152	802	194	115	40	349	38	309	67	414	2,388
4:45 - 5:45	238	602	160	1,000	23	729	157	909	204	128	35	367	33	312	63	408	2,684
5:00 - 6:00	203	631	182	996	23	674	156	853	208	142	34	384	33	279	44	356	2,589
5:15 - 6:15	159	575	142	876	28	605	131	764	176	130	15	321	28	261	48	337	2,298
5:30 - 6:30	166	515	131	812	21	552	128	701	180	137	19	336	33	270	57	360	2,209
5:45 - 6:45	140	364	92	596	18	416	116	550	160	126	27	313	33	267	58	358	1,817
6:00 - 7:00	152	296	88	534	20	413	122	555	143	96	34	273	36	263	59	358	1,720
Peak Volumes:	**238**	**602**	**160**	**1,000**	**23**	**729**	**157**	**909**	**204**	**128**	**35**	**367**	**33**	**312**	**63**	**408**	**2,684**



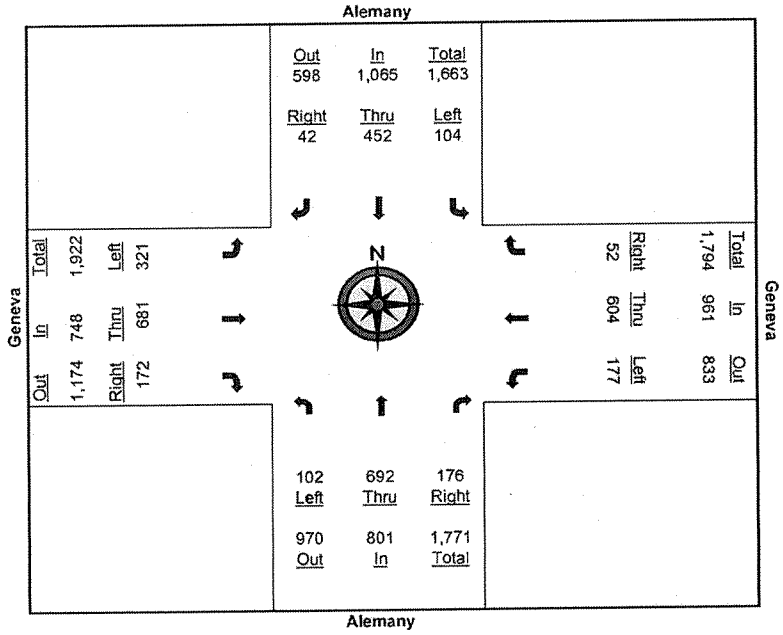
AM Peak-Hour Volume Count Worksheet

Date: 6/7/06
Counter: Kevin So and Kushal
Intersection Name: Alemany Blvd and Geneva Ave
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Alemany North Approach				Geneva East Approach				Alemany South Approach				Geneva West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	1	8	0	9	1	21	2	24	8	21	4	33	3	38	6	47
6:30	3	12	1	16	3	44	6	53	21	53	10	84	5	83	13	101
6:45	6	37	6	49	7	99	23	129	45	83	20	148	15	198	29	242
7:00	10	63	9	82	12	177	35	224	64	121	35	220	22	343	63	428
7:15	15	97	18	130	22	253	51	326	88	183	51	322	47	420	105	572
7:30	27	138	22	187	31	333	89	453	115	270	88	473	80	634	164	878
7:45	34	197	37	268	34	436	128	598	163	397	101	661	132	784	226	1,142
8:00	43	285	58	386	48	592	185	825	225	556	116	897	174	982	313	1,469
8:15	55	377	85	517	57	725	222	1,004	263	719	142	1,124	222	1,143	395	1,760
8:30	62	488	115	665	63	883	264	1,210	305	890	173	1,368	264	1,329	483	2,076
8:45	76	649	141	866	86	1,040	305	1,431	339	1,089	203	1,631	304	1,465	547	2,316
9:00	87	823	167	1,077	101	1,145	338	1,584	402	1,269	229	1,900	327	1,631	627	2,585

Peak Hour	Alemany North Approach				Geneva East Approach				Alemany South Approach				Geneva West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
6:00 - 7:00	10	63	9	82	12	177	35	224	64	121	35	220	22	343	63	428	954
6:15 - 7:15	14	89	18	121	21	232	49	302	80	162	47	289	44	382	99	525	1,237
6:30 - 7:30	24	126	21	171	28	289	83	400	94	217	78	389	75	551	151	777	1,737
6:45 - 7:45	28	160	31	219	27	337	105	469	118	314	81	513	117	586	197	900	2,101
7:00 - 8:00	33	222	49	304	36	415	150	601	161	435	81	677	152	639	250	1,041	2,623
7:15 - 8:15	40	280	67	387	35	472	171	678	175	536	91	802	175	723	290	1,188	3,055
7:30 - 8:30	35	350	93	478	32	550	175	757	190	620	85	895	184	695	319	1,198	3,328
7:45 - 8:45	42	452	104	598	52	604	177	833	176	692	102	970	172	681	321	1,174	3,575
8:00 - 9:00	44	538	109	691	53	553	153	759	177	713	113	1,003	153	649	314	1,116	3,569
Peak Volumes:	42	452	104	598	52	604	177	833	176	692	102	970	172	681	321	1,174	3,575



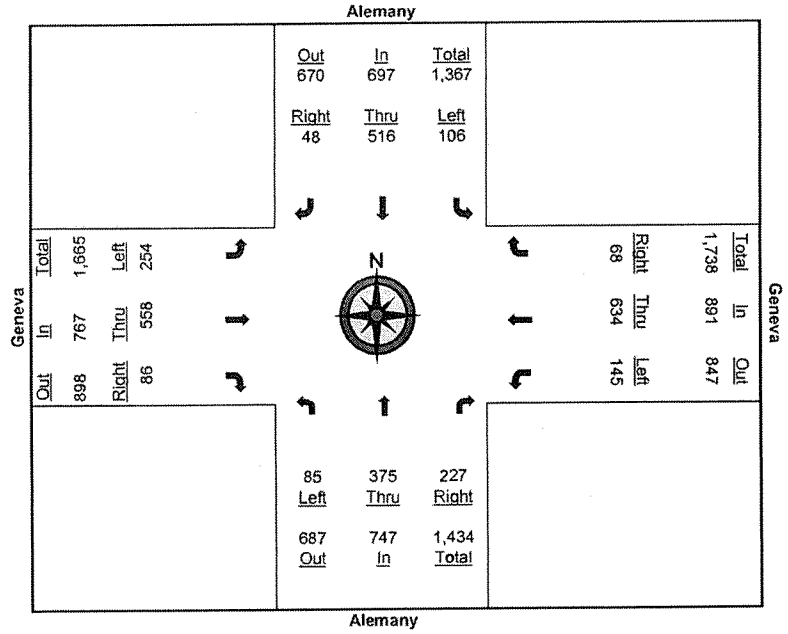
PM Peak-Hour Volume Count Worksheet

Date: 6/7/06
Counter: Kevin So and Kevin B.
Intersection Name: Alemany Blvd and Geneva Ave
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

	Alemany North Approach				Geneva East Approach				Alemany South Approach				Geneva West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	1	15	3	19	2	34	8	44	16	32	5	53	11	45	23	79
4:30	5	90	20	115	16	187	47	250	53	99	22	174	21	148	50	219
4:45	15	164	42	221	34	348	73	455	97	184	43	324	44	292	132	468
5:00	24	231	58	313	50	532	120	702	142	250	58	450	73	414	163	650
5:15	36	345	83	464	66	704	172	942	197	346	75	618	91	561	221	873
5:30	44	454	105	803	81	873	208	1,162	248	460	90	798	107	682	290	1,079
5:45	56	598	129	783	98	1,026	244	1,368	304	554	113	971	135	826	359	1,320
6:00	65	732	159	956	117	1,193	283	1,593	367	631	133	1,131	154	956	416	1,526
6:15	78	870	187	1,135	132	1,346	325	1,803	425	726	153	1,304	169	1,097	488	1,754
6:30	92	970	211	1,273	149	1,507	353	2,009	475	835	175	1,485	193	1,240	544	1,977
6:45	101	1,055	228	1,384	161	1,622	374	2,157	508	924	194	1,626	208	1,350	601	2,159
7:00	119	1,115	243	1,477	170	1,710	402	2,282	541	1,002	203	1,746	218	1,447	641	2,306

																	Hourly
Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Totals
4:00 - 5:00	24	231	58	313	50	532	120	702	142	250	58	450	73	414	163	650	2,115
4:15 - 5:15	35	330	80	445	64	670	164	898	181	314	70	565	80	516	198	794	2,702
4:30 - 5:30	39	364	85	488	65	686	161	912	195	361	68	624	86	534	240	860	2,884
4:45 - 5:45	41	434	87	562	64	678	171	913	207	370	70	647	91	534	227	852	2,974
5:00 - 8:00	41	501	101	643	67	661	163	891	225	381	75	681	81	542	253	878	3,091
5:15 - 6:15	42	525	104	671	66	642	153	861	228	380	78	686	78	538	287	881	3,099
5:30 - 6:30	48	516	106	670	68	834	145	847	227	375	85	687	86	558	254	898	3,102
5:45 - 6:45	45	457	99	601	63	596	130	789	204	370	81	655	73	524	242	839	2,884
6:00 - 7:00	54	383	84	521	53	517	119	689	174	371	70	815	64	491	225	780	2,605
Peak Volumes:	**48**	**516**	**106**	**670**	**68**	**634**	**145**	**847**	**227**	**375**	**85**	**687**	**86**	**558**	**254**	**898**	**3,102**



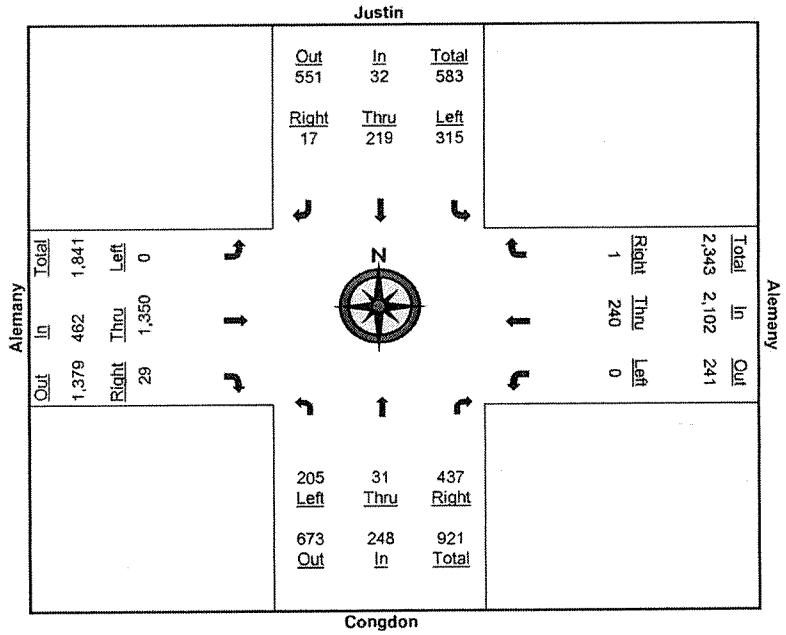
AM Peak-Hour Volume Count Worksheet

Date: 6/8/06
Counter: Alvan and Ngoc
Intersection Name: Alemany and Congdon/Justin
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Justin North Approach				Alemany East Approach				Congdon South Approach				Alemany West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15	5	24	23	52	0	34	0	34	42	2	17	61	2	105	0	107
6:30	7	53	59	119	0	76	0	78	100	6	38	144	7	275	0	282
6:45	9	92	79	180	1	112	0	113	182	14	73	269	8	481	0	489
7:00	12	125	99	236	2	179	0	181	291	28	121	438	15	796	0	811
7:15	16	186	212	414	3	228	0	231	409	27	182	618	25	1,124	0	1,149
7:30	17	232	285	534	3	285	0	288	528	35	230	793	32	1,443	0	1,475
7:45	20	279	341	640	3	361	0	364	660	49	282	991	37	1,811	0	1,848
8:00	29	344	414	787	3	419	0	422	728	57	328	1,111	44	2,148	0	2,190
8:15	32	400	475	907	3	511	0	514	818	66	365	1,249	57	2,371	0	2,428
8:30	36	448	515	999	3	601	0	604	901	74	412	1,387	75	2,539	0	2,614
8:45	41	508	571	1,120	3	655	0	658	969	86	446	1,501	89	2,692	0	2,781
9:00	43	534	602	1,179	3	718	0	721	1,043	96	475	1,614	92	2,854	0	2,946

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Hourly Totals
6:00 - 7:00	12	125	99	236	2	179	0	181	291	26	121	438	15	796	0	811	1,666
6:15 - 7:15	11	162	189	362	3	194	0	197	367	25	185	557	23	1,019	0	1,042	2,158
6:30 - 7:30	10	179	226	415	3	209	0	212	428	29	192	649	25	1,168	0	1,193	2,469
6:45 - 7:45	11	187	262	460	2	249	0	251	478	35	209	722	29	1,330	0	1,359	2,792
7:00 - 8:00	17	219	315	551	1	240	0	241	437	31	205	673	29	1,350	0	1,379	2,844
7:15 - 8:15	16	214	263	493	0	283	0	283	409	39	183	631	32	1,247	0	1,279	2,686
7:30 - 8:30	19	216	230	465	0	316	0	316	373	39	182	594	43	1,096	0	1,139	2,514
7:45 - 8:45	21	229	230	480	0	294	0	294	309	37	164	510	52	881	0	933	2,217
8:00 - 9:00	14	190	188	392	0	299	0	299	315	39	149	503	48	708	0	756	1,950
Peak Volumes:	**17**	**219**	**315**	**551**	**1**	**240**	**0**	**241**	**437**	**31**	**205**	**673**	**29**	**1,350**	**0**	**1,379**	**2,844**



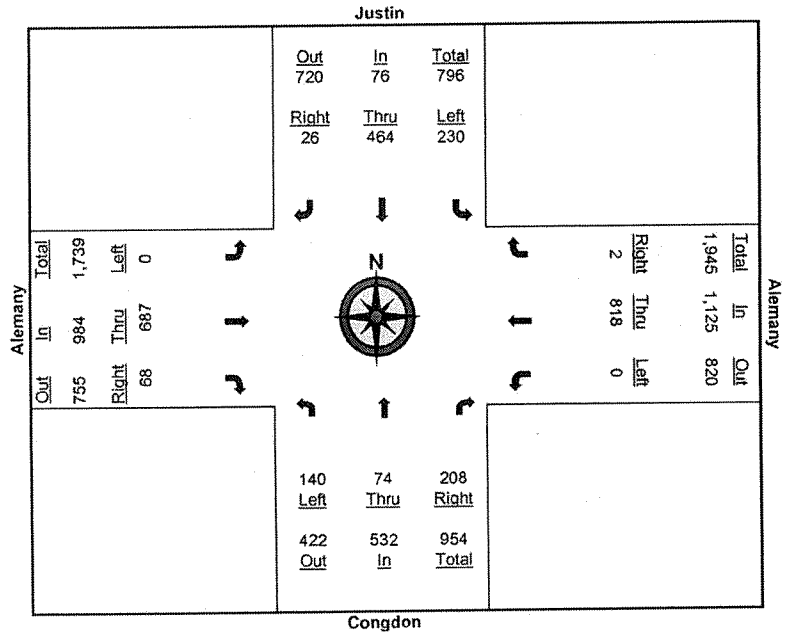
PM Peak-Hour Volume Count Worksheet

Date: 6/8/06
Counter: Alvan and Ngoc
Intersection Name: Alemany and Congdon/Justin
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	Justin North Approach				Alemany East Approach				Congdon South Approach				Alemany West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	3	41	18	62	0	44	0	44	24	2	8	34	7	60	0	67
4:30	7	106	42	155	0	116	0	116	62	3	15	80	13	175	0	188
4:45	12	196	89	297	0	286	0	286	113	13	50	176	25	348	0	373
5:00	21	317	138	476	2	457	0	459	162	21	75	258	35	483	0	518
5:15	27	421	197	645	3	616	0	619	210	44	107	361	50	642	0	692
5:30	34	539	255	828	4	809	0	813	256	56	147	459	65	814	0	879
5:45	43	680	310	1,033	4	1,088	0	1,092	298	75	182	555	83	1,018	0	1,101
6:00	47	781	368	1,196	4	1,275	0	1,279	370	95	215	680	103	1,170	0	1,273
6:15	54	855	411	1,320	4	1,460	0	1,464	420	120	258	798	119	1,319	0	1,438
6:30	63	974	451	1,488	5	1,620	0	1,625	451	127	275	853	132	1,482	0	1,614
6:45	68	1,056	485	1,609	6	1,706	0	1,712	512	139	301	952	147	1,635	0	1,782
7:00	71	1,113	511	1,695	7	1,813	0	1,820	554	145	323	1,022	148	1,726	0	1,874

Peak Hour	Justin North Approach				Alemany East Approach				Congdon South Approach				Alemany West Approach				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
4:00 - 5:00	21	317	138	476	2	457	0	459	162	21	75	258	35	483	0	518	1,711
4:15 - 5:15	24	380	179	583	3	572	0	575	186	42	99	327	43	582	0	625	2,110
4:30 - 5:30	27	433	213	673	4	693	0	697	194	53	132	379	52	639	0	691	2,440
4:45 - 5:45	31	484	221	736	4	802	0	806	185	62	132	379	58	670	0	728	2,649
5:00 - 6:00	26	464	230	720	2	818	0	820	208	74	140	422	68	687	0	755	2,717
5:15 - 6:15	27	434	214	675	1	844	0	845	210	76	151	437	69	677	0	746	2,703
5:30 - 6:30	29	435	196	660	1	811	0	812	195	71	128	394	67	668	0	735	2,601
5:45 - 6:45	25	376	175	576	2	618	0	620	214	64	119	397	64	617	0	681	2,274
6:00 - 7:00	24	332	143	499	3	538	0	541	184	50	108	342	45	556	0	601	1,983
Peak Volumes:	**26**	**464**	**230**	**720**	**2**	**818**	**0**	**820**	**208**	**74**	**140**	**422**	**68**	**687**	**0**	**755**	**2,717**



AM Peak-Hour Volume Count Worksheet

Date: 6/8/06
Counter: Joy and Gianina
Intersection Name: Sierra Point Pkwy and NB Ramps
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

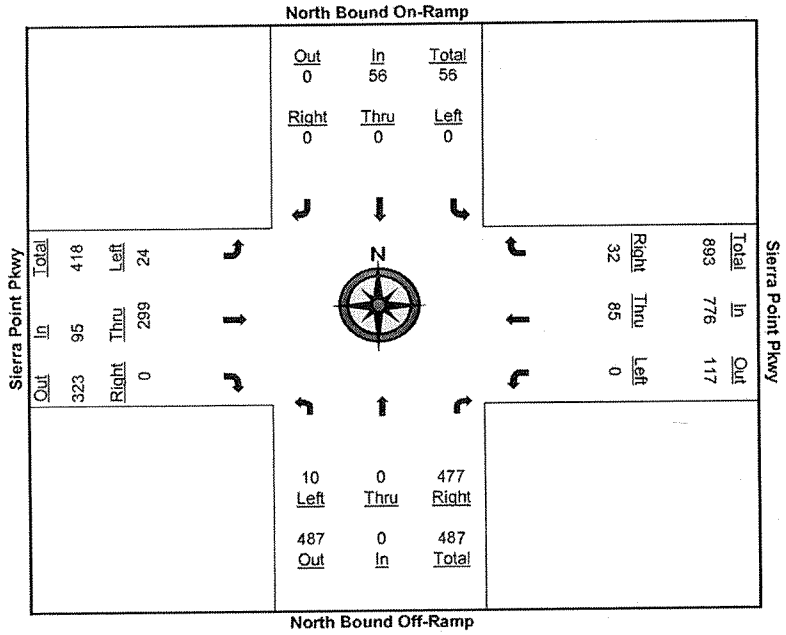
Start Time	North Bound On-Ramp North Approach			
	Right	Thru	Left	Total
6:00	0	0	0	0
6:15	0	0	0	0
6:30	0	0	0	0
6:45	0	0	0	0
7:00	0	0	0	0
7:15	0	0	0	0
7:30	0	0	0	0
7:45	0	0	0	0
8:00	0	0	0	0
8:15	0	0	0	0
8:30	0	0	0	0
8:45	0	0	0	0
9:00	0	0	0	0

Sierra Point Pkwy East Approach			
Right	Thru	Left	Total
0	0	0	0
12	16	0	28
18	27	0	45
29	35	0	64
36	43	0	79
45	61	0	106
48	77	0	125
55	92	0	147
61	119	0	180
68	129	0	197
74	158	0	232
87	177	0	264
97	197	0	294

North Bound Off-Ramp South Approach			
Right	Thru	Left	Total
0	0	0	0
8	0	1	9
30	0	6	36
57	0	10	67
90	0	12	102
126	0	15	141
181	0	16	197
269	0	23	292
430	0	25	455
502	0	28	530
629	0	32	661
746	0	33	779
837	0	33	870

Sierra Point Pkwy West Approach			
Right	Thru	Left	Total
0	0	0	0
0	13	1	14
0	25	1	26
0	37	5	42
0	55	10	65
0	68	14	82
0	100	16	116
0	140	28	168
0	230	41	271
0	265	47	312
0	347	49	396
0	439	52	491
0	505	62	567

Peak Hour	North Bound On-Ramp				Sierra Point Pkwy				North Bound Off-Ramp				Sierra Point Pkwy				Hourly Totals
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
6:00 - 7:00	0	0	0	0	36	43	0	79	90	0	12	102	0	55	10	65	246
6:15 - 7:15	0	0	0	0	33	45	0	78	118	0	14	132	0	55	13	68	278
6:30 - 7:30	0	0	0	0	30	50	0	80	151	0	10	161	0	75	15	90	331
6:45 - 7:45	0	0	0	0	26	57	0	83	212	0	13	225	0	103	23	126	434
7:00 - 8:00	0	0	0	0	25	76	0	101	340	0	13	353	0	175	31	206	660
7:15 - 8:15	0	0	0	0	23	68	0	91	376	0	13	389	0	197	33	230	710
7:30 - 8:30	0	0	0	0	26	81	0	107	448	0	16	464	0	247	33	280	851
7:45 - 8:45	0	0	0	0	32	85	0	117	477	0	10	487	0	299	24	323	927
8:00 - 9:00	0	0	0	0	36	78	0	114	407	0	8	415	0	275	21	296	825
Peak Volumes:	**0**	**0**	**0**	**0**	**32**	**85**	**0**	**117**	**477**	**0**	**10**	**487**	**0**	**299**	**24**	**323**	**927**



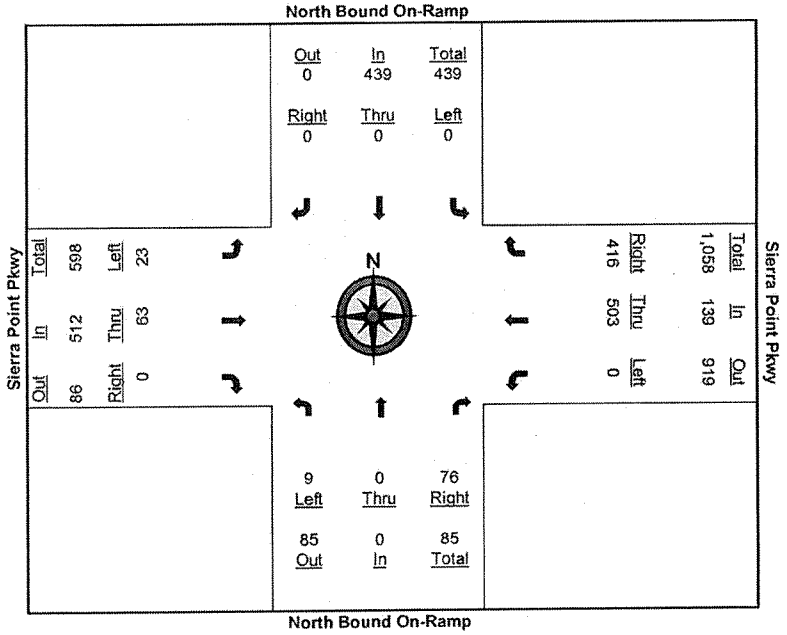
PM Peak-Hour Volume Count Worksheet

Date: 6/8/06
Counter: Joy and Gianina
Intersection Name: Sierra Point Pkwy and NB Ramps
Weather: Clear

AUTO-CENSUS
Traffic Monitoring and Analysis
19222 Vineyard Ln.
Saratoga, CA 95070
Phone 408-826-9673 Fax 408-877-1625

Start Time	North Bound On-Ramp North Approach				Sierra Point Pkwy East Approach				North Bound On-Ramp South Approach				Sierra Point Pkwy West Approach			
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	0	0	0	48	37	0	85	27	0	4	31	0	11	3	14
4:30	0	0	0	0	92	97	0	189	49	0	7	56	0	35	8	43
4:45	0	0	0	0	158	144	0	302	64	0	10	74	0	47	12	59
5:00	0	0	0	0	214	217	0	431	83	0	13	96	0	63	13	76
5:15	0	0	0	0	307	306	0	613	108	0	13	121	0	86	24	110
5:30	0	0	0	0	444	480	0	924	126	0	18	142	0	100	27	127
5:45	0	0	0	0	554	610	0	1,164	147	0	20	187	0	114	33	147
6:00	0	0	0	0	630	720	0	1,350	159	0	22	181	0	126	38	162
6:15	0	0	0	0	694	823	0	1,517	177	0	24	201	0	142	37	179
6:30	0	0	0	0	759	916	0	1,675	195	0	34	229	0	155	42	197
6:45	0	0	0	0	820	986	0	1,806	210	0	37	247	0	167	44	211
7:00	0	0	0	0	864	1,044	0	1,908	216	0	38	254	0	175	48	223

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Hourly Totals
4:00 - 5:00	0	0	0	0	214	217	0	431	83	0	13	96	0	63	13	76	603
4:15 - 5:15	0	0	0	0	259	269	0	528	81	0	9	90	0	75	21	96	714
4:30 - 5:30	0	0	0	0	352	383	0	735	77	0	9	86	0	65	19	84	905
4:45 - 5:45	0	0	0	0	396	466	0	862	83	0	10	93	0	67	21	88	1,043
5:00 - 6:00	0	0	0	0	416	503	0	919	76	0	9	85	0	63	23	86	1,090
5:15 - 6:15	0	0	0	0	387	517	0	904	69	0	11	80	0	56	13	69	1,053
5:30 - 6:30	0	0	0	0	315	436	0	751	69	0	18	87	0	55	15	70	908
5:45 - 6:45	0	0	0	0	266	376	0	642	63	0	17	80	0	53	11	64	786
6:00 - 7:00	0	0	0	0	234	324	0	558	57	0	16	73	0	49	12	61	692
Peak Volumes:	0	0	0	0	416	503	0	919	76	0	9	85	0	63	23	86	1,090

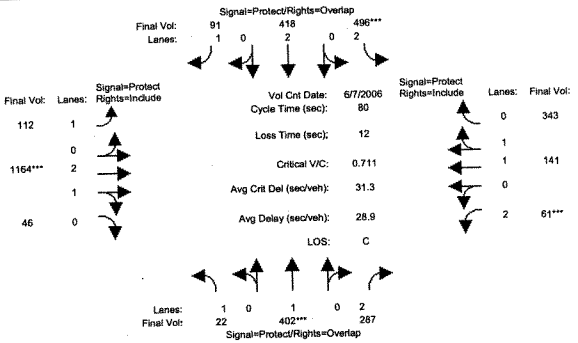


Appendix C-3

LOS Calculations

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

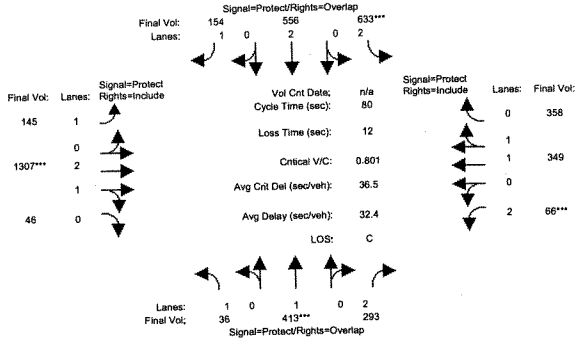
Intersection #1: Bayshore Blvd and Oyster Point Blvd



Street Name: Bayshore Blvd/Sister Cities Blvd							Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 7 Jun 2006 <<												
Base Vol:	22	402	287	496	418	91	112	1164	46	61	141	343
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	402	287	496	418	91	112	1164	46	61	141	343
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	402	287	496	418	91	112	1164	46	61	141	343
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	402	287	496	418	91	112	1164	46	61	141	343
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	402	287	496	418	91	112	1164	46	61	141	343
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	22	402	287	496	418	91	112	1164	46	61	141	343
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.88	0.12	2.00	1.00	1.00
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5387	213	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.21	0.09	0.16	0.11	0.05	0.06	0.22	0.22	0.02	0.07	0.20
Crit Moves:		****		****				****		****		
Green Time:	15.8	22.1	29.1	16.4	22.6	31.7	9.1	22.5	22.5	7.0	20.4	20.4
Volume/Cap:	0.06	0.77	0.25	0.77	0.39	0.13	0.56	0.77	0.77	0.22	0.29	0.77
Delay/Veh:	26.1	33.4	18.0	35.5	23.3	15.4	37.2	28.7	28.7	34.4	24.1	33.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.1	33.4	18.0	35.5	23.3	15.4	37.2	28.7	28.7	34.4	24.1	33.3
DesignQueue:	1	14	8	18	14	2	4	39	2	2	5	12

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd AM

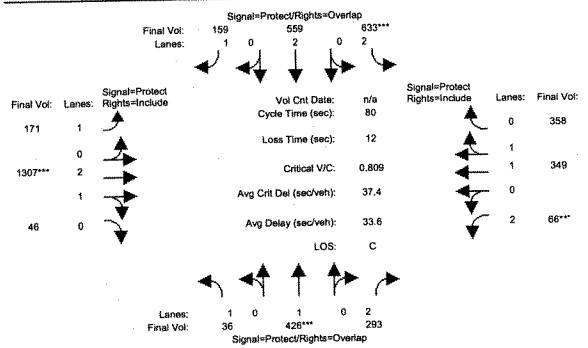
Intersection #1; Bayshore Blvd and Oyster Point Blvd



Street Name: Bayshore Blvd/Sister Cities Blvd							Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	36	413	293	633	556	154	145	1307	46	66	349	358
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	413	293	633	556	154	145	1307	46	66	349	358
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	413	293	633	556	154	145	1307	46	66	349	358
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	413	293	633	556	154	145	1307	46	66	349	358
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	413	293	633	556	154	145	1307	46	66	349	358
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	413	293	633	556	154	145	1307	46	66	349	358
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.89	0.11	2.00	1.00	1.00
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5409	190	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.09	0.20	0.15	0.09	0.08	0.24	0.24	0.02	0.18	0.20
Crit Moves:		****		****				****		****		
Green Time:	14.5	20.1	27.1	18.6	24.2	33.0	8.8	22.3	22.3	7.0	20.5	20.5
Volume/Cap:	0.11	0.87	0.27	0.87	0.48	0.21	0.75	0.87	0.87	0.24	0.72	0.80
Delay/Veh:	27.6	43.9	19.4	40.1	23.1	15.3	50.1	32.7	32.7	34.5	29.6	32.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.6	43.9	19.4	40.1	23.1	15.3	50.1	32.7	32.7	34.5	29.6	32.9
DesignQueue:	1	15	9	23	18	4	6	45	2	3	12	12

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

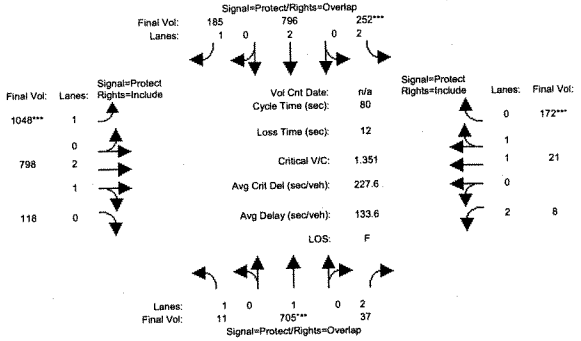
Intersection #1: Bayshore Blvd and Oyster Point Blvd



Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	36	426	293	633	559	159	171	1307	46	66	349	358
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	426	293	633	559	159	171	1307	46	66	349	358
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	426	293	633	559	159	171	1307	46	66	349	358
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	426	293	633	559	159	171	1307	46	66	349	358
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	426	293	633	559	159	171	1307	46	66	349	358
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	426	293	633	559	159	171	1307	46	66	349	358
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.89	0.11	2.00	1.00	1.00
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5409	190	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.09	0.20	0.15	0.09	0.10	0.24	0.24	0.02	0.18	0.20
Crit Moves:		****		****				****		****		
Green Time:	14.5	20.5	27.5	18.4	24.4	33.8	9.4	22.1	22.1	7.0	19.7	19.7
Volume/Cap:	0.11	0.87	0.27	0.87	0.48	0.22	0.83	0.87	0.87	0.24	0.75	0.83
Delay/Veh:	27.5	44.5	19.1	41.2	23.0	14.8	58.4	33.5	33.5	34.5	31.1	35.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.5	44.5	19.1	41.2	23.0	14.8	58.4	33.5	33.5	34.5	31.1	35.5
DesignQueue:	1	15	9	23	18	4	7	45	2	3	12	13

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Curm AM w/o proj

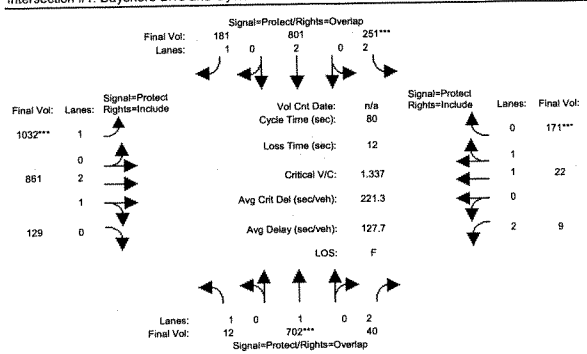
Intersection #1: Bayshore Blvd and Oyster Point Blvd



Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	11	705	37	252	796	185	1048	798	118	8	21	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	705	37	252	796	185	1048	798	118	8	21	172
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	705	37	252	796	185	1048	798	118	8	21	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	705	37	252	796	185	1048	798	118	8	21	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	705	37	252	796	185	1048	798	118	8	21	172
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	705	37	252	796	185	1048	798	118	8	21	172
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.60	0.40	2.00	1.00	1.00
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	4878	721	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.37	0.01	0.08	0.21	0.11	0.60	0.16	0.16	0.00	0.01	0.10
Crit Moves:		****		****			****					****
Green Time:	7.8	19.5	34.0	7.0	18.7	50.2	31.5	27.0	27.0	14.5	10.0	10.0
Volume/Cap:	0.06	1.52	0.03	0.91	0.90	0.17	1.52	0.48	0.48	0.01	0.09	0.79
Delay/Veh:	32.9	276	13.4	68.8	41.4	6.3	266.3	21.2	21.2	26.9	31.0	49.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.9	276	13.4	68.8	41.4	6.3	266.3	21.2	21.2	26.9	31.0	49.3
DesignQueue:	0	26	1	10	29	3	33	25	4	0	1	7

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/proj

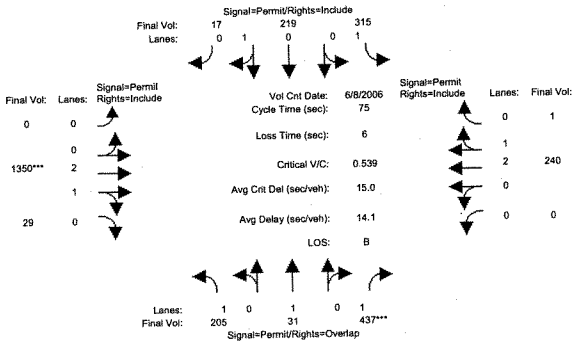
Intersection #1: Bayshore Blvd and Oyster Point Blvd



Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	12	702	40	251	801	181	1032	861	129	9	22	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	702	40	251	801	181	1032	861	129	9	22	171
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	702	40	251	801	181	1032	861	129	9	22	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	702	40	251	801	181	1032	861	129	9	22	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	702	40	251	801	181	1032	861	129	9	22	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	12	702	40	251	801	181	1032	861	129	9	22	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.59	0.41	2.00	1.00	1.00
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	4869	730	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.37	0.01	0.08	0.21	0.10	0.59	0.18	0.18	0.00	0.01	0.10
Crit Moves:		****		****			****					****
Green Time:	7.8	19.6	33.3	7.0	18.8	50.2	31.4	27.7	27.7	13.7	10.0	10.0
Volume/Cap:	0.07	1.50	0.03	0.91	0.90	0.16	1.50	0.51	0.51	0.02	0.09	0.78
Delay/Veh:	33.0	268	13.8	68.0	41.2	6.3	259.0	21.0	21.0	27.6	31.0	48.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.0	268	13.8	68.0	41.2	6.3	259.0	21.0	21.0	27.6	31.0	48.8
DesignQueue:	0	26	1	10	29	3	33	26	4	0	1	7

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

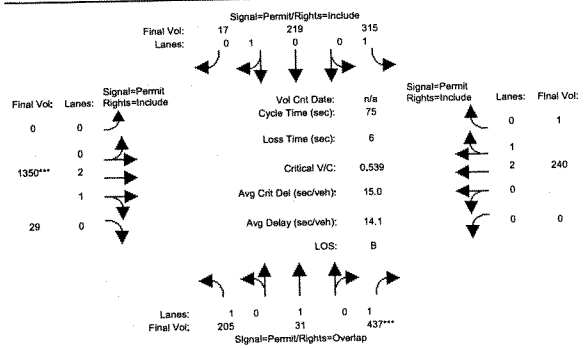
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 8 Jun 2006 <<												
Base Vol:	205	31	437	315	219	17	0	1350	29	0	240	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	31	437	315	219	17	0	1350	29	0	240	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	31	437	315	219	17	0	1350	29	0	240	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	31	437	315	219	17	0	1350	29	0	240	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	31	437	315	219	17	0	1350	29	0	240	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	205	31	437	315	219	17	0	1350	29	0	240	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.93	0.07	0.00	2.93	0.07	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1670	130	0	5482	118	0	5577	23
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.25	0.18	0.13	0.13	0.00	0.25	0.25	0.00	0.04	0.04
Crit Moves:			****					****				
Green Time:	34.7	34.7	34.7	34.7	34.7	34.7	0.0	34.3	34.3	0.0	34.3	34.3
Volume/Cap:	0.25	0.04	0.54	0.39	0.28	0.28	0.00	0.54	0.54	0.00	0.09	0.09
Delay/Veh:	12.4	11.0	15.1	13.5	12.6	12.6	0.0	14.9	14.9	0.0	11.6	11.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	11.0	15.1	13.5	12.6	12.6	0.0	14.9	14.9	0.0	11.6	11.6
DesignQueue:	5	1	10	7	5	0	0	33	1	0	5	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd AM

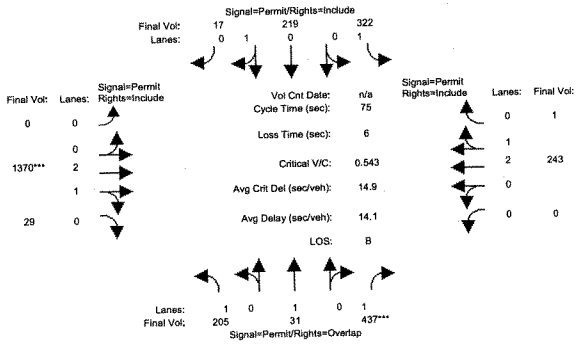
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	205	31	437	315	219	17	0	1350	29	0	240	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	31	437	315	219	17	0	1350	29	0	240	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	31	437	315	219	17	0	1350	29	0	240	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	31	437	315	219	17	0	1350	29	0	240	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	31	437	315	219	17	0	1350	29	0	240	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	205	31	437	315	219	17	0	1350	29	0	240	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.93	0.07	0.00	2.93	0.07	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1670	130	0	5482	118	0	5577	23
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.25	0.18	0.13	0.13	0.00	0.25	0.25	0.00	0.04	0.04
Crit Moves:			****					****				
Green Time:	34.7	34.7	34.7	34.7	34.7	34.7	0.0	34.3	34.3	0.0	34.3	34.3
Volume/Cap:	0.25	0.04	0.54	0.39	0.28	0.28	0.00	0.54	0.54	0.00	0.09	0.09
Delay/Veh:	12.4	11.0	15.1	13.5	12.6	12.6	0.0	14.9	14.9	0.0	11.6	11.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	11.0	15.1	13.5	12.6	12.6	0.0	14.9	14.9	0.0	11.6	11.6
DesignQueue:	5	1	10	7	5	0	0	33	1	0	5	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #2: Alemany Blvd and Congdon St

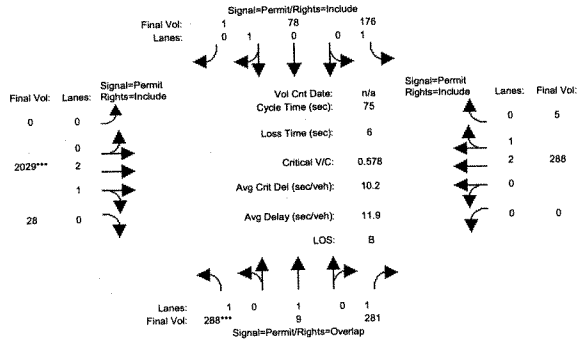


Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	205	31	437	322	219	17	0	1370	29	0	243	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	31	437	322	219	17	0	1370	29	0	243	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	31	437	322	219	17	0	1370	29	0	243	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	31	437	322	219	17	0	1370	29	0	243	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	31	437	322	219	17	0	1370	29	0	243	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	205	31	437	322	219	17	0	1370	29	0	243	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.93	0.07	0.00	2.94	0.06	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1670	130	0	5484	116	0	5577	23
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.25	0.18	0.13	0.13	0.00	0.25	0.25	0.00	0.04	0.04
Crit Moves:			****					****				
Green Time:	34.5	34.5	34.5	34.5	34.5	34.5	0.0	34.5	34.5	0.0	34.5	34.5
Volume/Cap:	0.25	0.04	0.54	0.40	0.29	0.29	0.00	0.54	0.54	0.00	0.09	0.09
Delay/Veh:	12.6	11.1	15.3	13.7	12.8	12.8	0.0	14.8	14.8	0.0	11.4	11.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.6	11.1	15.3	13.7	12.8	12.8	0.0	14.8	14.8	0.0	11.4	11.4
DesignQueue:	5	1	10	8	5	0	0	33	1	0	6	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/o proj

Intersection #2: Alemany Blvd and Congdon St

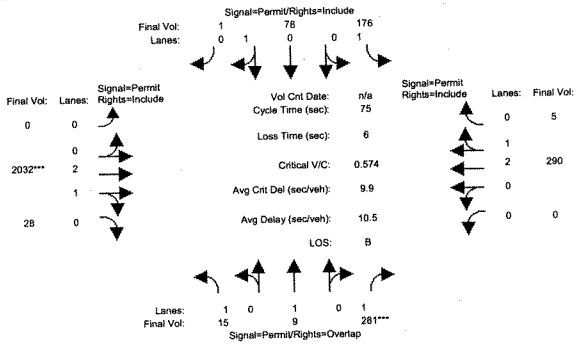


Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	288	9	281	176	78	1	0	2029	28	0	288	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	288	9	281	176	78	1	0	2029	28	0	288	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	288	9	281	176	78	1	0	2029	28	0	288	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	288	9	281	176	78	1	0	2029	28	0	288	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	288	9	281	176	78	1	0	2029	28	0	288	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	288	9	281	176	78	1	0	2029	28	0	288	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.99	0.01	0.00	2.96	0.04	0.00	2.95	0.05
Final Sat.:	1750	1900	1750	1750	1777	23	0	5524	76	0	5504	96
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.16	0.10	0.04	0.04	0.00	0.37	0.37	0.00	0.05	0.05
Crit Moves:	****							****				
Green Time:	21.3	21.3	21.3	21.3	21.3	21.3	0.0	47.7	47.7	0.0	47.7	47.7
Volume/Cap:	0.58	0.02	0.56	0.35	0.15	0.15	0.00	0.58	0.58	0.00	0.08	0.08
Delay/Veh:	24.7	19.3	24.4	21.8	20.2	20.2	0.0	8.1	8.1	0.0	5.3	5.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.7	19.3	24.4	21.8	20.2	20.2	0.0	8.1	8.1	0.0	5.3	5.3
DesignQueue:	9	0	9	5	2	0	0	34	0	0	4	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/proj

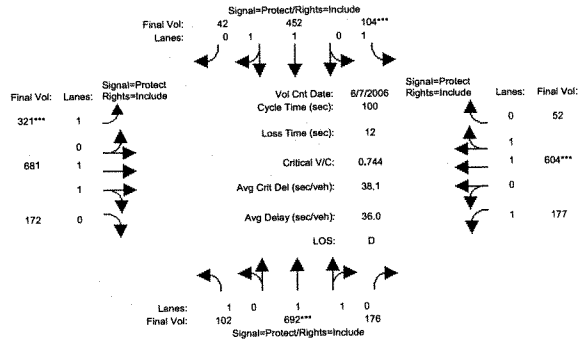
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	15	9	281	176	78	1	0	2032	28	0	290	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	9	281	176	78	1	0	2032	28	0	290	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	9	281	176	78	1	0	2032	28	0	290	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	9	281	176	78	1	0	2032	28	0	290	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	9	281	176	78	1	0	2032	28	0	290	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	9	281	176	78	1	0	2032	28	0	290	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.99	0.01	0.00	2.96	0.04	0.00	2.95	0.05
Final Sat.:	1750	1900	1750	1750	1777	23	0	5524	76	0	5505	95
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.16	0.10	0.04	0.04	0.00	0.37	0.37	0.00	0.05	0.05
Crit Moves:			****					****				
Green Time:	21.0	21.0	21.0	21.0	21.0	21.0	0.0	48.0	48.0	0.0	48.0	48.0
Volume/Cap:	0.03	0.02	0.57	0.36	0.16	0.16	0.00	0.57	0.57	0.00	0.08	0.08
Delay/Veh:	19.7	19.6	24.9	22.1	20.5	20.5	0.0	7.9	7.9	0.0	5.1	5.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.7	19.6	24.9	22.1	20.5	20.5	0.0	7.9	7.9	0.0	5.1	5.1
DesignQueue:	0	0	9	5	2	0	0	34	0	0	4	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

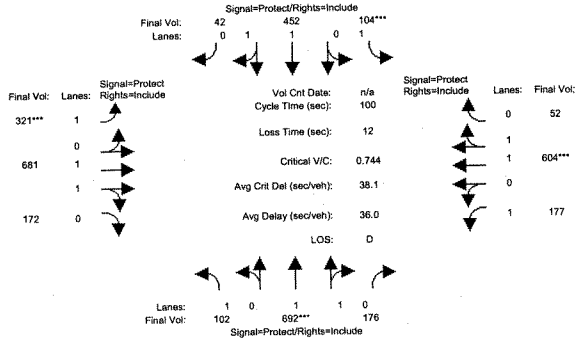
Intersection #3: Alemany Blvd and Geneva Ave



Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 7 Jun 2006 <<												
Base Vol:	102	692	176	104	452	42	321	681	172	177	604	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	692	176	104	452	42	321	681	172	177	604	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	692	176	104	452	42	321	681	172	177	604	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	692	176	104	452	42	321	681	172	177	604	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	692	176	104	452	42	321	681	172	177	604	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	102	692	176	104	452	42	321	681	172	177	604	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.58	0.42	1.00	1.83	0.17	1.00	1.59	0.41	1.00	1.84	0.16
Final Sat.:	1750	2949	750	1750	3385	315	1750	2953	746	1750	3406	293
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.06	0.13	0.13	0.18	0.23	0.23	0.10	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	13.6	31.5	31.5	8.0	25.9	25.9	24.7	33.7	33.7	14.8	23.8	23.8
Volume/Cap:	0.43	0.74	0.74	0.74	0.51	0.51	0.74	0.68	0.68	0.68	0.74	0.74
Delay/Veh:	40.9	33.3	33.3	64.3	32.1	32.1	41.7	30.2	30.2	47.8	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.9	33.3	33.3	64.3	32.1	32.1	41.7	30.2	30.2	47.8	38.7	38.7
DesignQueue:	5	28	7	5	19	2	14	27	7	9	27	2

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd AM

Intersection #3: Alemany Blvd and Geneva Ave

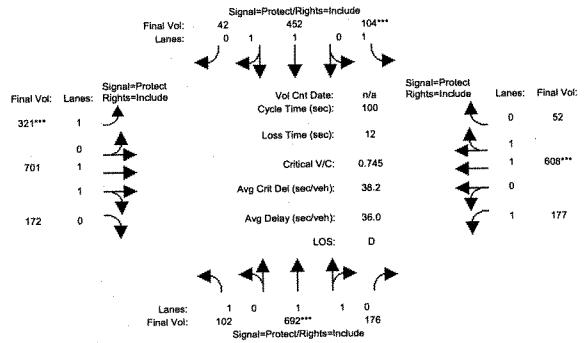


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	102	692	176	104	452	42	321	681	172	177	604	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	692	176	104	452	42	321	681	172	177	604	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	692	176	104	452	42	321	681	172	177	604	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	692	176	104	452	42	321	681	172	177	604	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	692	176	104	452	42	321	681	172	177	604	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	102	692	176	104	452	42	321	681	172	177	604	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.58	0.42	1.00	1.83	0.17	1.00	1.59	0.41	1.00	1.84	0.16
Final Sat.:	1750	2949	750	1750	3385	315	1750	2953	746	1750	3406	293
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.06	0.13	0.13	0.18	0.23	0.23	0.10	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	13.6	31.5	31.5	8.0	25.9	25.9	24.7	33.7	33.7	14.8	23.8	23.8
Volume/Cap:	0.43	0.74	0.74	0.74	0.51	0.51	0.74	0.68	0.68	0.68	0.74	0.74
Delay/Veh:	40.9	33.3	33.3	64.3	32.1	32.1	41.7	30.2	30.2	47.8	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.9	33.3	33.3	64.3	32.1	32.1	41.7	30.2	30.2	47.8	38.7	38.7
DesignQueue:	5	28	7	5	19	2	14	27	7	9	27	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #3: Alemany Blvd and Geneva Ave

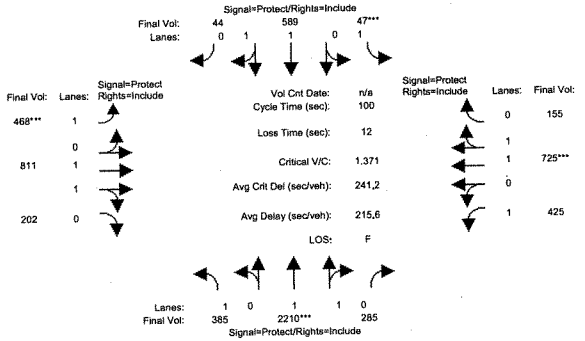


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	102	692	176	104	452	42	321	701	172	177	608	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	692	176	104	452	42	321	701	172	177	608	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	692	176	104	452	42	321	701	172	177	608	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	692	176	104	452	42	321	701	172	177	608	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	692	176	104	452	42	321	701	172	177	608	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	102	692	176	104	452	42	321	701	172	177	608	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.58	0.42	1.00	1.83	0.17	1.00	1.60	0.40	1.00	1.84	0.16
Final Sat.:	1750	2949	750	1750	3385	315	1750	2970	729	1750	3408	291
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.06	0.13	0.13	0.18	0.24	0.24	0.10	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	13.6	31.5	31.5	8.0	25.9	25.9	24.6	34.0	34.0	14.6	23.9	23.9
Volume/Cap:	0.43	0.75	0.75	0.75	0.52	0.52	0.75	0.69	0.69	0.69	0.75	0.75
Delay/Veh:	40.9	33.3	33.3	64.5	32.2	32.2	41.8	30.2	30.2	48.7	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.9	33.3	33.3	64.5	32.2	32.2	41.8	30.2	30.2	48.7	38.7	38.7
DesignQueue:	5	28	7	5	19	2	14	27	7	9	27	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/o proj

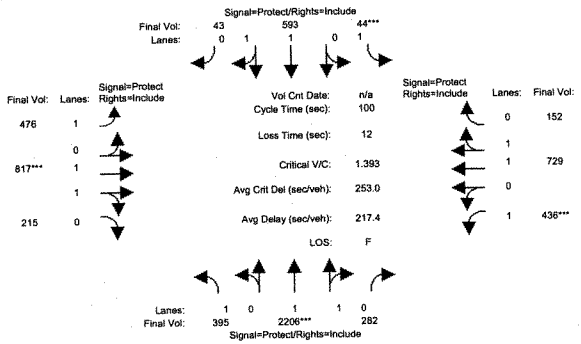
Intersection #3: Alemany Blvd and Geneva Ave



Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	385	2210	285	47	589	44	468	811	202	425	725	155
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	385	2210	285	47	589	44	468	811	202	425	725	155
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	385	2210	285	47	589	44	468	811	202	425	725	155
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	385	2210	285	47	589	44	468	811	202	425	725	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	385	2210	285	47	589	44	468	811	202	425	725	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	385	2210	285	47	589	44	468	811	202	425	725	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.77	0.23	1.00	1.86	0.14	1.00	1.59	0.41	1.00	1.64	0.36
Final Sat.:	1750	3277	423	1750	3443	257	1750	2962	738	1750	3048	652
Capacity Analysis Module:												
Vol/Sat:	0.22	0.67	0.67	0.03	0.17	0.17	0.27	0.27	0.27	0.24	0.24	0.24
Crit Moves:		****		****			****				****	
Green Time:	30.0	46.3	46.3	7.0	23.3	23.3	18.4	18.4	18.4	16.3	16.3	16.3
Volume/Cap:	0.73	1.46	1.46	0.38	0.73	0.73	1.46	1.49	1.49	1.49	1.46	1.46
Delay/Veh:	36.7	236	235.5	46.4	38.8	38.8	262.7	269	268.7	279.8	256	256.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.7	236	235.5	46.4	38.8	38.8	262.7	269	268.7	279.8	256	256.3
DesignQueue:	16	80	10	2	26	2	23	40	10	21	36	8

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Curn AM w/proj

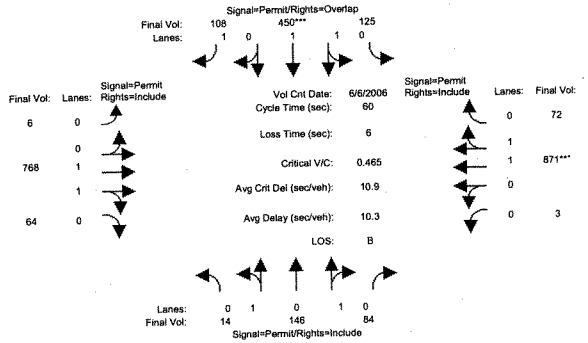
Intersection #3: Alemany Blvd and Geneva Ave



Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	395	2206	282	44	593	43	476	817	215	436	729	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	395	2206	282	44	593	43	476	817	215	436	729	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	395	2206	282	44	593	43	476	817	215	436	729	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	395	2206	282	44	593	43	476	817	215	436	729	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	395	2206	282	44	593	43	476	817	215	436	729	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	395	2206	282	44	593	43	476	817	215	436	729	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.77	0.23	1.00	1.86	0.14	1.00	1.57	0.43	1.00	1.65	0.35
Final Sat.:	1750	3280	419	1750	3450	250	1750	2929	771	1750	3061	638
Capacity Analysis Module:												
Vol/Sat:	0.23	0.67	0.67	0.03	0.17	0.17	0.27	0.28	0.28	0.25	0.24	0.24
Crit Moves:		****		****				****		****		
Green Time:	29.7	45.4	45.4	7.0	22.6	22.6	19.0	18.8	18.8	16.8	16.6	16.6
Volume/Cap:	0.76	1.48	1.48	0.36	0.76	0.76	1.43	1.48	1.48	1.48	1.43	1.43
Delay/Veh:	38.3	248	247.6	46.2	40.2	40.2	251.4	265	265.3	276.0	245	245.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	248	247.6	46.2	40.2	40.2	251.4	265	265.3	276.0	245	245.3
DesignQueue:	16	81	10	2	27	2	23	40	10	21	36	7

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

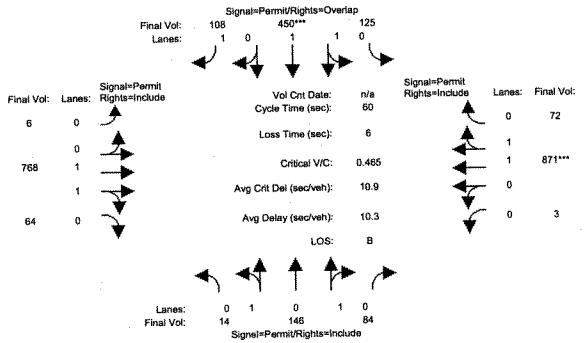
Intersection #4: Mission St and Geneva Ave



Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 6 Jun 2006 <<												
Base Vol:	14	146	84	125	450	108	6	768	64	3	871	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	146	84	125	450	108	6	768	64	3	871	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	146	84	125	450	108	6	768	64	3	871	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	146	84	125	450	108	6	768	64	3	871	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	146	84	125	450	108	6	768	64	3	871	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	14	146	84	125	450	108	6	768	64	3	871	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.11	1.20	0.69	0.45	1.55	1.00	0.01	1.84	0.15	0.01	1.84	0.15
Final Sat.:	207	2154	1239	804	2895	1750	26	3299	275	11	3315	274
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.16	0.06	0.23	0.23	0.23	0.26	0.26	0.26
Crit Moves:					****						****	
Green Time:	20.1	20.1	20.1	20.1	20.1	20.1	33.9	33.9	33.9	33.9	33.9	33.9
Volume/Cap:	0.20	0.20	0.20	0.46	0.46	0.18	0.41	0.41	0.41	0.46	0.46	0.46
Delay/Veh:	14.3	14.3	14.3	16.0	16.0	14.3	7.5	7.5	7.5	7.9	7.9	7.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.3	14.3	14.3	16.0	16.0	14.3	7.5	7.5	7.5	7.9	7.9	7.9
DesignQueue:	0	3	2	3	10	2	0	12	1	0	14	1

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd AM

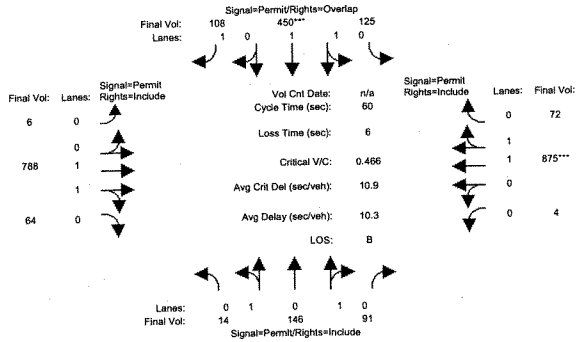
Intersection #4: Mission St and Geneva Ave



Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	14	146	84	125	450	108	6	768	64	3	871	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	146	84	125	450	108	6	768	64	3	871	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	146	84	125	450	108	6	768	64	3	871	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	146	84	125	450	108	6	768	64	3	871	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	146	84	125	450	108	6	768	64	3	871	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	14	146	84	125	450	108	6	768	64	3	871	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.11	1.20	0.69	0.45	1.55	1.00	0.01	1.84	0.15	0.01	1.84	0.15
Final Sat.:	207	2154	1239	804	2895	1750	26	3299	275	11	3315	274
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.16	0.06	0.23	0.23	0.23	0.26	0.26	0.26
Crit Moves:					****						****	
Green Time:	20.1	20.1	20.1	20.1	20.1	20.1	33.9	33.9	33.9	33.9	33.9	33.9
Volume/Cap:	0.20	0.20	0.20	0.46	0.46	0.18	0.41	0.41	0.41	0.46	0.46	0.46
Delay/Veh:	14.3	14.3	14.3	16.0	16.0	14.3	7.5	7.5	7.5	7.9	7.9	7.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.3	14.3	14.3	16.0	16.0	14.3	7.5	7.5	7.5	7.9	7.9	7.9
DesignQueue:	0	3	2	3	10	2	0	12	1	0	14	1

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #4: Mission St and Geneva Ave

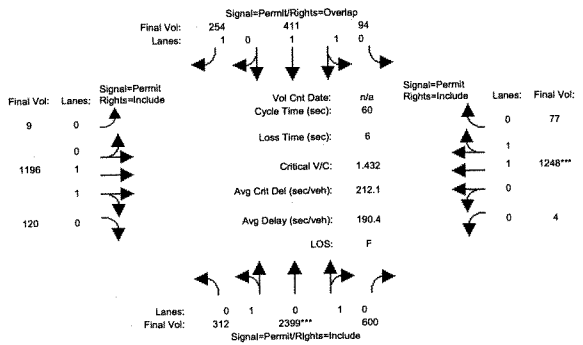


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	14	146	91	125	450	108	6	788	64	4	875	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	146	91	125	450	108	6	788	64	4	875	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	146	91	125	450	108	6	788	64	4	875	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	146	91	125	450	108	6	788	64	4	875	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	146	91	125	450	108	6	788	64	4	875	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	14	146	91	125	450	108	6	788	64	4	875	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.11	1.16	0.73	0.45	1.55	1.00	0.01	1.84	0.15	0.01	1.84	0.15
Final Sat.:	201	2094	1305	804	2895	1750	25	3306	269	15	3312	273
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.16	0.06	0.24	0.24	0.24	0.26	0.26	0.26
Crit Moves:					****						****	
Green Time:	20.0	20.0	20.0	20.0	20.0	20.0	34.0	34.0	34.0	34.0	34.0	34.0
Volume/Cap:	0.21	0.21	0.21	0.47	0.47	0.19	0.42	0.42	0.42	0.47	0.47	0.47
Delay/Veh:	14.4	14.4	14.4	16.1	16.1	14.4	7.5	7.5	7.5	7.8	7.8	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.4	14.4	14.4	16.1	16.1	14.4	7.5	7.5	7.5	7.8	7.8	7.8
DesignQueue:	0	3	2	3	10	2	0	12	1	0	14	1

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Curn AM w/o proj

Intersection #4: Mission St and Geneva Ave

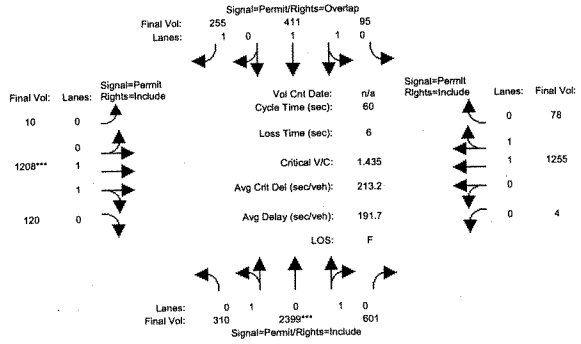


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	312	2399	600	94	411	254	9	1196	120	4	1248	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	312	2399	600	94	411	254	9	1196	120	4	1248	77
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	2399	600	94	411	254	9	1196	120	4	1248	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	312	2399	600	94	411	254	9	1196	120	4	1248	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	312	2399	600	94	411	254	9	1196	120	4	1248	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	312	2399	600	94	411	254	9	1196	120	4	1248	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.19	1.45	0.36	0.38	1.62	1.00	0.01	1.81	0.18	0.01	1.88	0.11
Final Sat.:	339	2608	652	689	3011	1750	24	3250	326	11	3381	209
Capacity Analysis Module:												
Vol/Sat:	0.92	0.92	0.92	0.14	0.14	0.15	0.37	0.37	0.37	0.37	0.37	0.37
Crit Moves:		****									****	
Green Time:	38.5	38.5	38.5	38.5	38.5	38.5	15.5	15.5	15.5	15.5	15.5	15.5
Volume/Cap:	1.43	1.43	1.43	0.21	0.21	0.23	1.43	1.43	1.43	1.43	1.43	1.43
Delay/Veh:	207.7	208	207.7	4.5	4.5	4.6	221.0	221	221.0	222.9	223	222.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	207.7	208	207.7	4.5	4.5	4.6	221.0	221	221.0	222.9	223	222.9
DesignQueue:	5	37	9	1	5	3	0	33	3	0	34	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Curn AM w/proj

Intersection #4: Mission St and Geneva Ave

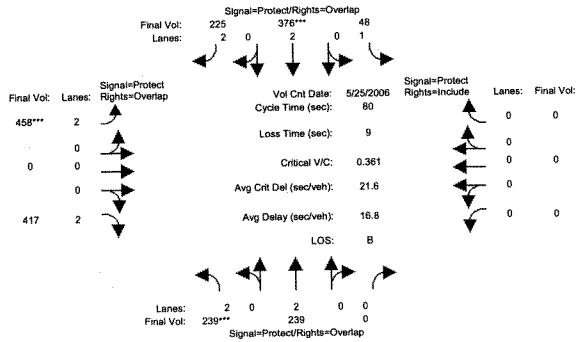


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	310	2399	601	95	411	255	10	1208	120	4	1255	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	310	2399	601	95	411	255	10	1208	120	4	1255	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	310	2399	601	95	411	255	10	1208	120	4	1255	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	310	2399	601	95	411	255	10	1208	120	4	1255	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	310	2399	601	95	411	255	10	1208	120	4	1255	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	310	2399	601	95	411	255	10	1208	120	4	1255	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.19	1.45	0.36	0.39	1.61	1.00	0.01	1.81	0.18	0.01	1.88	0.11
Final Sat.:	337	2609	654	695	3005	1750	27	3250	323	11	3379	210
Capacity Analysis Module:												
Vol/Sat:	0.92	0.92	0.92	0.14	0.14	0.15	0.37	0.37	0.37	0.37	0.37	0.37
Crit Moves:		****						****				
Green Time:	38.5	38.5	38.5	38.5	38.5	38.5	15.5	15.5	15.5	15.5	15.5	15.5
Volume/Cap:	1.43	1.43	1.43	0.21	0.21	0.23	1.43	1.43	1.43	1.43	1.43	1.43
Delay/Veh:	208.9	209	208.9	4.5	4.5	4.6	224.0	224	224.0	223.5	223	223.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	208.9	209	208.9	4.5	4.5	4.6	224.0	224	224.0	223.5	223	223.5
DesignQueue:	5	37	9	1	5	3	0	33	3	0	34	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #5: Bayshore Blvd and Geneva Ave

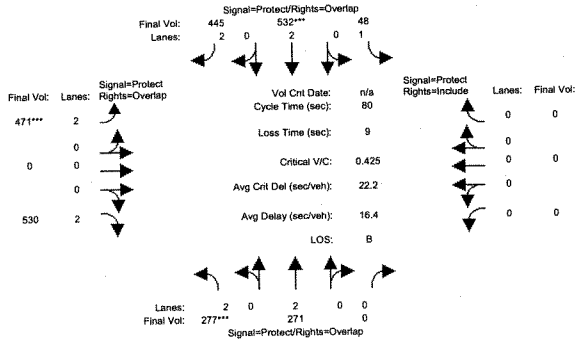


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module: >> Count Date: 25 May 2006 <<												
Base Vol:	239	239	0	48	376	225	458	0	417	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	239	239	0	48	376	225	458	0	417	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	239	239	0	48	376	225	458	0	417	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	239	239	0	48	376	225	458	0	417	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	239	239	0	48	376	225	458	0	417	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	239	239	0	48	376	225	458	0	417	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.00	0.03	0.10	0.07	0.15	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	16.8	22.8	0.0	16.0	21.9	54.2	32.2	0.0	49.1	0.0	0.0	0.0
Volume/Cap:	0.36	0.22	0.00	0.14	0.36	0.11	0.36	0.00	0.22	0.00	0.00	0.00
Delay/Veh:	27.3	21.9	0.0	26.5	23.6	4.5	16.9	0.0	7.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.3	21.9	0.0	26.5	23.6	4.5	16.9	0.0	7.0	0.0	0.0	0.0
DesignQueue:	9	8	0	2	12	3	13	0	7	0	0	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd AM

Intersection #5: Bayshore Blvd and Geneva Ave

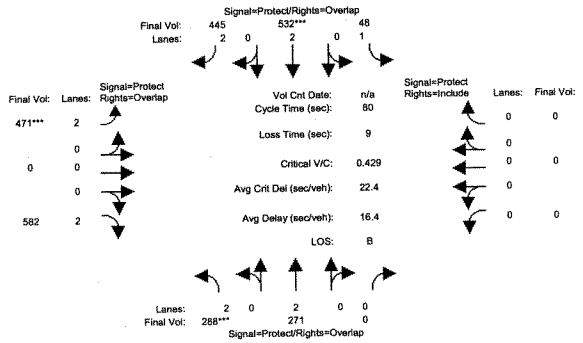


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	277	271	0	48	532	445	471	0	530	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	277	271	0	48	532	445	471	0	530	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	277	271	0	48	532	445	471	0	530	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	277	271	0	48	532	445	471	0	530	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	277	271	0	48	532	445	471	0	530	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	277	271	0	48	532	445	471	0	530	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.07	0.00	0.03	0.14	0.14	0.15	0.00	0.17	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	16.5	25.2	0.0	17.7	26.3	54.5	28.1	0.0	44.7	0.0	0.0	0.0
Volume/Cap:	0.43	0.23	0.00	0.12	0.43	0.21	0.43	0.00	0.30	0.00	0.00	0.00
Delay/Veh:	28.0	20.3	0.0	25.1	21.2	4.8	20.0	0.0	9.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.0	20.3	0.0	25.1	21.2	4.8	20.0	0.0	9.5	0.0	0.0	0.0
DesignQueue:	10	8	0	2	16	7	14	0	11	0	0	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #5: Bayshore Blvd and Geneva Ave

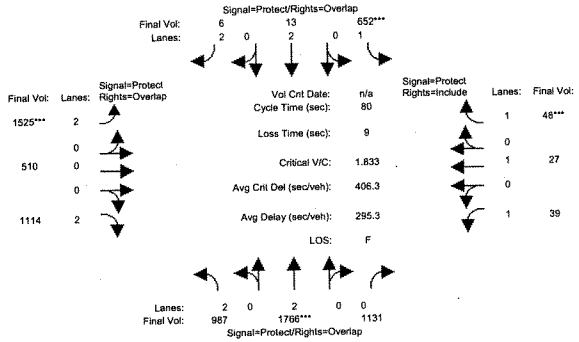


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	288	271	0	48	532	445	471	0	582	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	288	271	0	48	532	445	471	0	582	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	288	271	0	48	532	445	471	0	582	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	288	271	0	48	532	445	471	0	582	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	288	271	0	48	532	445	471	0	582	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	288	271	0	48	532	445	471	0	582	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.07	0.00	0.03	0.14	0.14	0.15	0.00	0.18	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	17.0	25.4	0.0	17.8	26.1	54.0	27.9	0.0	44.9	0.0	0.0	0.0
Volume/Cap:	0.43	0.22	0.00	0.12	0.43	0.21	0.43	0.00	0.33	0.00	0.00	0.00
Delay/Veh:	27.7	20.2	0.0	25.0	21.4	5.0	20.2	0.0	9.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	20.2	0.0	25.0	21.4	5.0	20.2	0.0	9.6	0.0	0.0	0.0
DesignQueue:	10	8	0	2	17	7	14	0	12	0	0	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/o proj

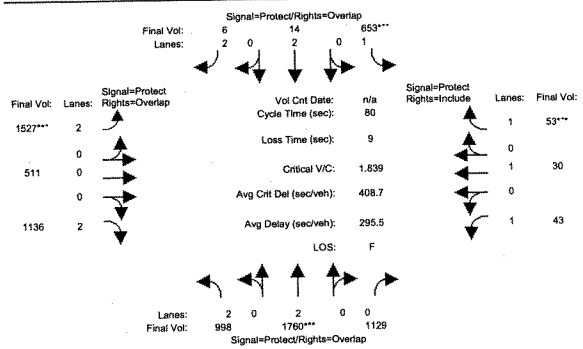
Intersection #5: Bayshore Blvd and Geneva Ave



Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	987	1766	1131	652	13	6	1525	510	1114	39	27	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	987	1766	1131	652	13	6	1525	510	1114	39	27	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	987	1766	1131	652	13	6	1525	510	1114	39	27	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	987	1766	1131	652	13	6	1525	510	1114	39	27	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	987	1766	1131	652	13	6	1525	510	1114	39	27	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	987	1766	1131	652	13	6	1525	510	1114	39	27	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.83	0.93	0.95	0.93	0.92	1.00	0.92
Lanes:	2.00	1.20	0.80	1.00	2.00	2.00	1.94	0.64	1.42	1.00	1.00	1.00
Final Sat.:	3150	2254	1444	1750	3800	3150	3438	1150	2512	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.31	0.78	0.78	0.37	0.00	0.00	0.44	0.44	0.44	0.02	0.01	0.03
Crit Moves:		****		****			****					****
Green Time:	36.1	34.2	35.2	16.3	14.4	33.7	19.4	19.6	55.6	1.0	1.2	1.2
Volume/Cap:	0.70	1.83	1.78	1.83	0.02	0.00	1.83	1.81	0.64	1.81	0.95	1.83
Delay/Veh:	19.1	400	376.8	417.6	27.0	13.4	407.5	398	7.0	541.4	186	529.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.1	400	376.8	417.6	27.0	13.4	407.5	398	7.0	541.4	186	529.9
DesignQueue:	26	56	35	25	0	0	58	19	17	2	1	2

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/proj

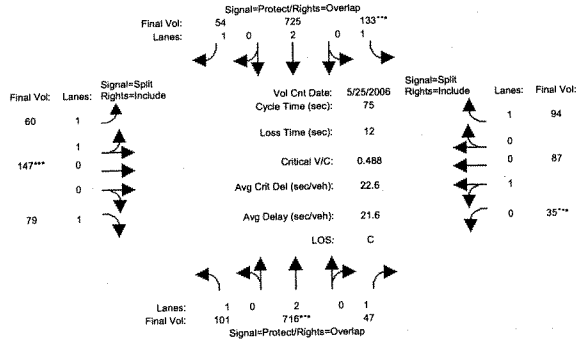
Intersection #5: Bayshore Blvd and Geneva Ave



Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	998	1760	1129	653	14	6	1527	511	1136	43	30	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	998	1760	1129	653	14	6	1527	511	1136	43	30	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	998	1760	1129	653	14	6	1527	511	1136	43	30	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	998	1760	1129	653	14	6	1527	511	1136	43	30	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	998	1760	1129	653	14	6	1527	511	1136	43	30	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	998	1760	1129	653	14	6	1527	511	1136	43	30	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.83	0.93	0.95	0.93	0.92	1.00	0.92
Lanes:	2.00	1.20	0.80	1.00	2.00	2.00	1.93	0.63	1.44	1.00	1.00	1.00
Final Sat.:	3150	2253	1445	1750	3800	3150	3416	1143	2541	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.32	0.78	0.78	0.37	0.00	0.00	0.45	0.45	0.45	0.02	0.02	0.03
Crit Moves:		****		****			****					****
Green Time:	36.0	34.0	35.1	16.2	14.2	33.7	19.5	19.7	55.7	1.1	1.3	1.3
Volume/Cap:	0.70	1.84	1.78	1.84	0.02	0.00	1.84	1.82	0.64	1.82	0.96	1.84
Delay/Veh:	19.3	403	376.8	420.0	27.2	13.4	409.9	400	7.0	532.9	182	523.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.3	403	376.8	420.0	27.2	13.4	409.9	400	7.0	532.9	182	523.4
DesignQueue:	26	56	35	25	1	0	58	19	17	2	1	2

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

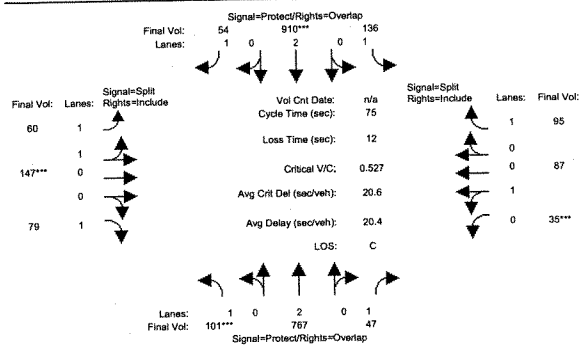
Intersection #6: Bayshore Blvd and Old County Rd



Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 25 May 2006 <<												
Base Vol:	101	716	47	133	725	54	60	147	79	35	87	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	716	47	133	725	54	60	147	79	35	87	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	716	47	133	725	54	60	147	79	35	87	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	716	47	133	725	54	60	147	79	35	87	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	716	47	133	725	54	60	147	79	35	87	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	101	716	47	133	725	54	60	147	79	35	87	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.29	0.71	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	516	1284	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.03	0.08	0.19	0.03	0.03	0.08	0.05	0.07	0.07	0.05
Crit Moves:		****		****				****		****		
Green Time:	13.4	29.0	39.4	11.7	27.3	39.2	11.9	11.9	11.9	10.4	10.4	10.4
Volume/Cap:	0.32	0.49	0.05	0.49	0.52	0.06	0.22	0.49	0.28	0.49	0.49	0.39
Delay/Veh:	27.5	17.7	8.7	30.3	19.1	8.8	27.6	29.7	28.4	31.3	31.3	30.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.5	17.7	8.7	30.3	19.1	8.8	27.6	29.7	28.4	31.3	31.3	30.4
DesignQueue:	4	19	1	5	20	1	2	5	3	1	3	3

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd AM

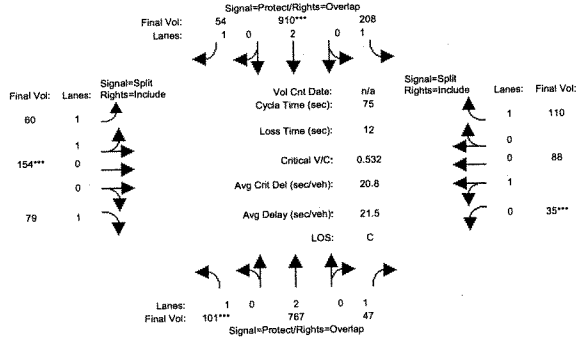
Intersection #6: Bayshore Blvd and Old County Rd



Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	101	767	47	136	910	54	60	147	79	35	87	95
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	767	47	136	910	54	60	147	79	35	87	95
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	767	47	136	910	54	60	147	79	35	87	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	767	47	136	910	54	60	147	79	35	87	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	767	47	136	910	54	60	147	79	35	87	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	101	767	47	136	910	54	60	147	79	35	87	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.29	0.71	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	516	1284	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.03	0.08	0.24	0.03	0.03	0.08	0.05	0.07	0.07	0.05
Crit Moves:	****				****			****		****		
Green Time:	8.2	28.8	38.8	13.3	33.9	44.8	10.9	10.9	10.9	10.0	10.0	10.0
Volume/Cap:	0.53	0.53	0.05	0.44	0.53	0.05	0.23	0.53	0.31	0.51	0.51	0.41
Delay/Veh:	34.4	18.2	9.0	28.5	15.1	6.3	28.5	31.0	29.3	32.0	32.0	30.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	18.2	9.0	28.5	15.1	6.3	28.5	31.0	29.3	32.0	32.0	30.9
DesignQueue:	4	21	1	5	22	1	2	5	3	1	3	3

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #6: Bayshore Blvd and Old County Rd

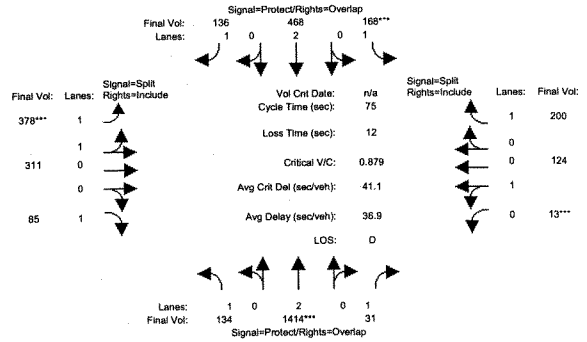


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	101	767	47	208	910	54	60	154	79	35	88	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	767	47	208	910	54	60	154	79	35	88	110
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	767	47	208	910	54	60	154	79	35	88	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	767	47	208	910	54	60	154	79	35	88	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	767	47	208	910	54	60	154	79	35	88	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	101	767	47	208	910	54	60	154	79	35	88	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.28	0.72	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	512	1288	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.03	0.12	0.24	0.03	0.03	0.08	0.05	0.07	0.07	0.06
Crit Moves:	****				****			****		****		
Green Time:	8.1	26.2	36.2	15.4	33.6	44.9	11.4	11.4	11.4	10.0	10.0	10.0
Volume/Cap:	0.54	0.58	0.06	0.58	0.54	0.05	0.23	0.54	0.30	0.51	0.51	0.47
Delay/Veh:	34.7	20.5	10.3	29.2	15.4	6.2	28.1	30.8	28.9	32.1	32.1	31.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.7	20.5	10.3	29.2	15.4	6.2	28.1	30.8	28.9	32.1	32.1	31.6
DesignQueue:	4	22	1	7	22	1	2	6	3	1	3	4

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/o proj

Intersection #6: Bayshore Blvd and Old County Rd

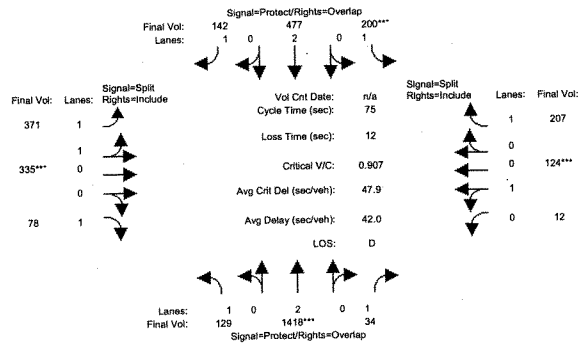


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	134	1414	31	168	468	136	378	311	85	13	124	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	134	1414	31	168	468	136	378	311	85	13	124	200
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	1414	31	168	468	136	378	311	85	13	124	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	1414	31	168	468	136	378	311	85	13	124	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	1414	31	168	468	136	378	311	85	13	124	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	134	1414	31	168	468	136	378	311	85	13	124	200
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.11	0.89	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1947	1602	1750	171	1629	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.37	0.02	0.10	0.12	0.08	0.19	0.19	0.05	0.08	0.08	0.11
Crit Moves:		****		****			****			****		
Green Time:	15.4	29.8	39.8	7.7	22.0	37.6	15.5	15.5	15.5	10.0	10.0	10.0
Volume/Cap:	0.37	0.94	0.03	0.94	0.42	0.16	0.94	0.94	0.23	0.57	0.57	0.86
Delay/Veh:	26.3	33.1	8.4	82.6	21.6	10.2	48.7	48.7	25.1	33.8	33.8	57.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.3	33.1	8.4	82.6	21.6	10.2	48.7	48.7	25.1	33.8	33.8	57.4
DesignQueue:	5	39	1	6	14	3	13	11	3	0	5	7

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum AM w/proj

Intersection #6: Bayshore Blvd and Old County Rd

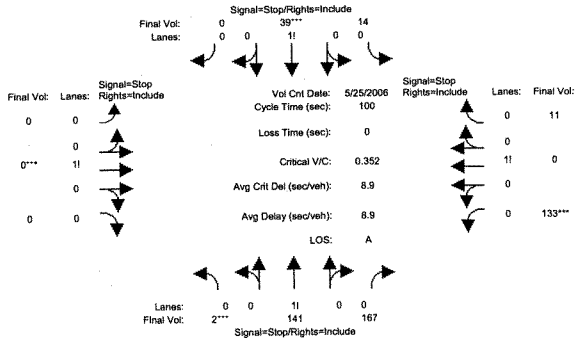


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1418	34	200	477	142	371	335	78	12	124	207
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1418	34	200	477	142	371	335	78	12	124	207
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1418	34	200	477	142	371	335	78	12	124	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	129	1418	34	200	477	142	371	335	78	12	124	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.06	0.94	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1865	1684	1750	159	1641	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.02	0.11	0.13	0.08	0.20	0.20	0.04	0.08	0.08	0.12
Crit Moves:		****		****				****			****	
Green Time:	15.5	28.8	38.8	8.8	22.1	37.5	15.4	15.4	15.4	10.0	10.0	10.0
Volume/Cap:	0.36	0.97	0.04	0.97	0.43	0.16	0.97	0.97	0.22	0.57	0.57	0.89
Delay/Veh:	26.1	39.8	8.9	87.2	21.6	10.3	55.9	55.9	25.1	33.6	33.6	62.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.1	39.8	8.9	87.2	21.6	10.3	55.9	55.9	25.1	33.6	33.6	62.8
DesignQueue:	4	40	1	8	14	3	13	12	3	0	5	8

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #7: Tunnel Ave and Lagoon Wy

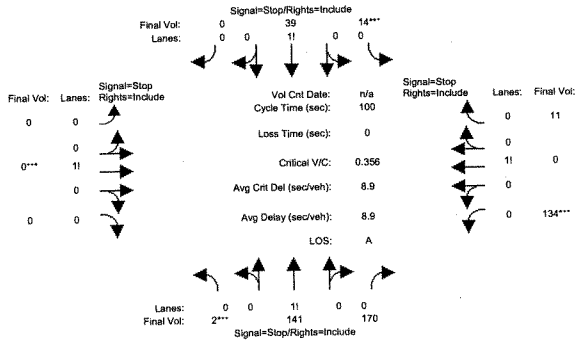


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 May 2006 <<												
Base Vol:	2	141	167	14	39	0	0	0	0	133	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	141	167	14	39	0	0	0	0	133	0	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	141	167	14	39	0	0	0	0	133	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	141	167	14	39	0	0	0	0	133	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	141	167	14	39	0	0	0	0	133	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	141	167	14	39	0	0	0	0	133	0	11
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.45	0.54	0.26	0.74	0.00	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	6	401	475	198	553	0	0	688	0	657	0	54
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.07	0.07	xxxx	xxxx	0.00	xxxx	0.20	xxxx	0.20
Crit Moves:	****				****			****		****		
Delay/Veh:	9.1	9.1	9.1	7.9	7.9	0.0	0.0	0.0	0.0	8.9	0.0	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	9.1	9.1	7.9	7.9	0.0	0.0	0.0	0.0	8.9	0.0	8.9
LOS by Move:	A	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		9.1			7.9			xxxxxx			8.9	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.1			7.9			xxxxxx			8.9	
LOS by Appr:		A			A			*			A	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Bkgrd AM

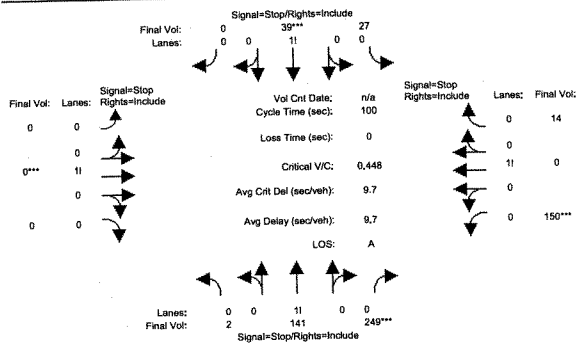
Intersection #7: Tunnel Ave and Lagoon Wy



Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	2	141	170	14	39	0	0	0	0	134	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	141	170	14	39	0	0	0	0	134	0	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	141	170	14	39	0	0	0	0	134	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	141	170	14	39	0	0	0	0	134	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	141	170	14	39	0	0	0	0	134	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	141	170	14	39	0	0	0	0	134	0	11
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.45	0.54	0.26	0.74	0.00	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	6	397	478	198	552	0	0	687	0	656	0	54
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.07	0.07	xxxx	xxxx	0.00	xxxx	0.20	xxxx	0.20
Crit Moves:	****				****			****		****		
Delay/Veh:	9.1	9.1	9.1	7.9	7.9	0.0	0.0	0.0	0.0	8.9	0.0	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	9.1	9.1	7.9	7.9	0.0	0.0	0.0	0.0	8.9	0.0	8.9
LOS by Move:	A	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		9.1			7.9			xxxxxx			8.9	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.1			7.9			xxxxxx			8.9	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project AM

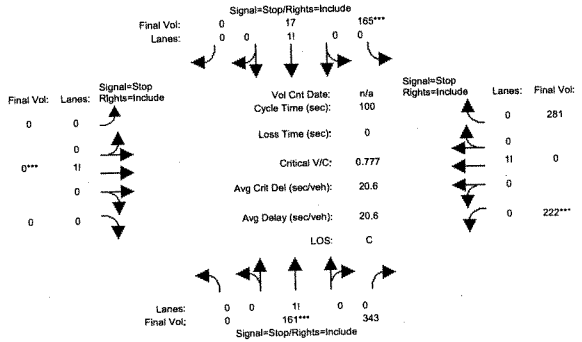
Intersection #7: Tunnel Ave and Lagoon Wy



Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	2	141	249	27	39	0	0	0	0	150	0	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	141	249	27	39	0	0	0	0	150	0	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	141	249	27	39	0	0	0	0	150	0	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	141	249	27	39	0	0	0	0	150	0	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	141	249	27	39	0	0	0	0	150	0	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	141	249	27	39	0	0	0	0	150	0	14
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.36	0.63	0.41	0.59	0.00	0.00	1.00	0.00	0.91	0.00	0.09
Final Sat.:	4	315	556	295	425	0	0	644	0	620	0	58
Capacity Analysis Module:												
Vol/Sat:	0.45	0.45	0.45	0.09	0.09	xxxx	xxxx	0.00	xxxx	0.24	xxxx	0.24
Crit Moves:			****		****			****		****		
Delay/Veh:	10.1	10.1	10.1	8.2	8.2	0.0	0.0	0.0	0.0	9.4	0.0	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.1	10.1	10.1	8.2	8.2	0.0	0.0	0.0	0.0	9.4	0.0	9.4
LOS by Move:	B	B	B	A	A	*	*	*	*	A	*	A
ApproachDel:		10.1			8.2			xxxxxx			9.4	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		10.1			8.2			xxxxxx			9.4	
LOS by Appr:		B			A			*			A	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM w/o proj

Intersection #7: Tunnel Ave and Lagoon Wy

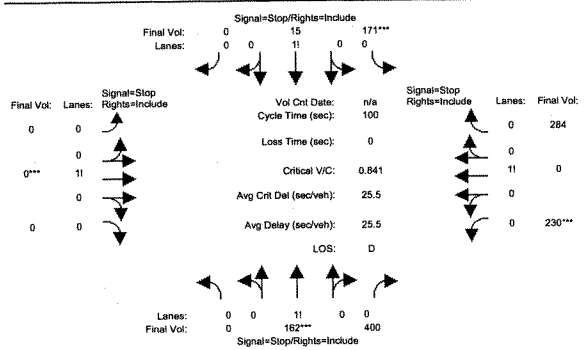


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	161	343	165	17	0	0	0	0	222	0	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	161	343	165	17	0	0	0	0	222	0	281
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	161	343	165	17	0	0	0	0	222	0	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	161	343	165	17	0	0	0	0	222	0	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	161	343	165	17	0	0	0	0	222	0	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	161	343	165	17	0	0	0	0	222	0	281
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.32	0.68	0.91	0.09	0.00	0.00	1.00	0.00	0.44	0.00	0.56
Final Sat.:	0	215	457	488	50	0	0	454	0	286	0	362
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.75	0.75	0.34	0.34	xxxx	xxxx	0.00	xxxx	0.78	xxxx	0.78
Crit Moves:		****		****				****		****		
Delay/Veh:	0.0	21.0	21.0	12.1	12.1	0.0	0.0	0.0	0.0	23.2	0.0	23.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	21.0	21.0	12.1	12.1	0.0	0.0	0.0	0.0	23.2	0.0	23.2
LOS by Move:	*	C	C	B	B	*	*	*	*	C	*	C
ApproachDel:		21.0			12.1			xxxxxx			23.2	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		21.0			12.1			xxxxxx			23.2	
LOS by Appr:		C			B			*			C	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM w/proj

Intersection #7: Tunnel Ave and Lagoon Wy

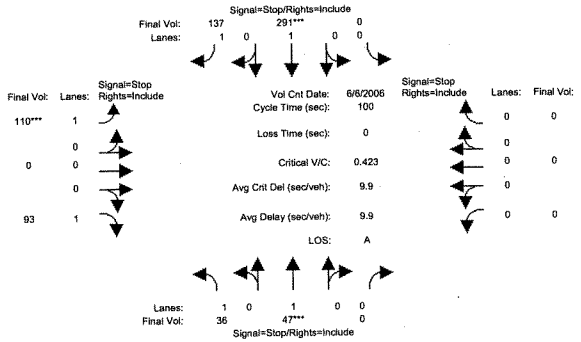


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	162	400	171	15	0	0	0	0	230	0	284
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	162	400	171	15	0	0	0	0	230	0	284
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	162	400	171	15	0	0	0	0	230	0	284
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	162	400	171	15	0	0	0	0	230	0	284
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	162	400	171	15	0	0	0	0	230	0	284
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	162	400	171	15	0	0	0	0	230	0	284
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.29	0.71	0.92	0.08	0.00	0.00	1.00	0.00	0.45	0.00	0.55
Final Sat.:	0	193	475	481	42	0	0	453	0	281	0	347
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.84	0.84	0.36	0.36	xxxx	xxxx	0.00	xxxx	0.82	xxxx	0.82
Crit Moves:		****		****				****		****		
Delay/Veh:	0.0	28.4	28.4	12.6	12.6	0.0	0.0	0.0	0.0	27.0	0.0	27.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.4	28.4	12.6	12.6	0.0	0.0	0.0	0.0	27.0	0.0	27.0
LOS by Move:	*	D	D	B	B	*	*	*	*	D	*	D
ApproachDel:		28.4			12.6			xxxxxx			27.0	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		28.4			12.6			xxxxxx			27.0	
LOS by Appr:		D			B			*			D	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

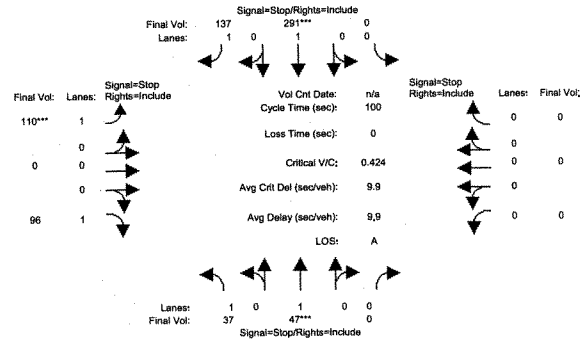


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 6 Jun 2006 <<												
Base Vol:	36	47	0	0	291	137	110	0	93	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	47	0	0	291	137	110	0	93	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	47	0	0	291	137	110	0	93	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	47	0	0	291	137	110	0	93	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	47	0	0	291	137	110	0	93	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	47	0	0	291	137	110	0	93	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	584	637	0	0	687	789	559	0	684	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.07	xxxx	xxxx	0.42	0.17	0.20	xxxx	0.14	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	9.0	8.6	0.0	0.0	11.5	8.0	10.3	0.0	8.4	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	8.6	0.0	0.0	11.5	8.0	10.3	0.0	8.4	0.0	0.0	0.0
LOS by Move:	A	A	*	*	B	A	B	*	A	*	*	*
ApproachDel:		8.8			10.4			9.4			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		8.8			10.4			9.4			xxxxxx	
LOS by Appr:		A			B			A			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Bkgrd AM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

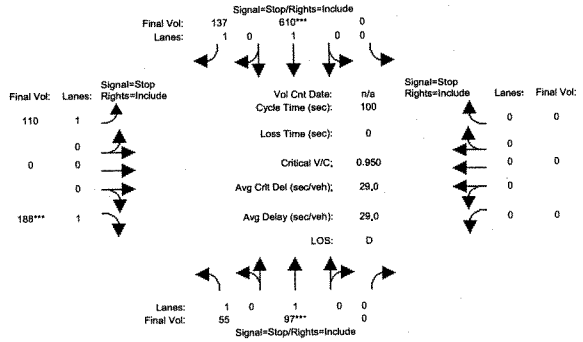


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	37	47	0	0	291	137	110	0	96	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	47	0	0	291	137	110	0	96	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	47	0	0	291	137	110	0	96	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	47	0	0	291	137	110	0	96	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	47	0	0	291	137	110	0	96	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	37	47	0	0	291	137	110	0	96	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	584	635	0	0	686	788	558	0	684	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.07	xxxx	xxxx	0.42	0.17	0.20	xxxx	0.14	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	9.1	8.6	0.0	0.0	11.5	8.1	10.3	0.0	8.4	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	8.6	0.0	0.0	11.5	8.1	10.3	0.0	8.4	0.0	0.0	0.0
LOS by Move:	A	A	*	*	B	A	B	*	A	*	*	*
ApproachDel:		8.8			10.4			9.4			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		8.8			10.4			9.4			xxxxxx	
LOS by Appr:		A			B			A			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project AM

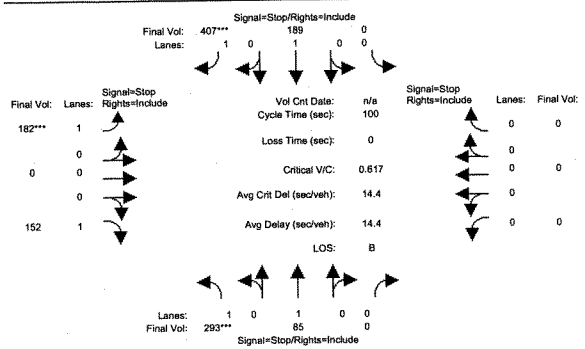
Intersection #8: Sierra Point Pkwy and Lagoon Wy



Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	55	97	0	0	610	137	110	0	188	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	97	0	0	610	137	110	0	188	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	97	0	0	610	137	110	0	188	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	97	0	0	610	137	110	0	188	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	97	0	0	610	137	110	0	188	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	55	97	0	0	610	137	110	0	188	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	520	561	0	0	642	719	496	0	593	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	xxxx	xxxx	0.95	0.19	0.22	xxxx	0.32	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	10.2	10.2	0.0	0.0	46.9	8.7	11.8	0.0	11.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.2	10.2	0.0	0.0	46.9	8.7	11.8	0.0	11.2	0.0	0.0	0.0
LOS by Move:	B	B	*	*	E	A	B	*	B	*	*	*
ApproachDel:		10.2			39.9			11.4			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		10.2			39.9			11.4			xxxxxx	
LOS by Appr:		B			E			B			*	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM w/o proj

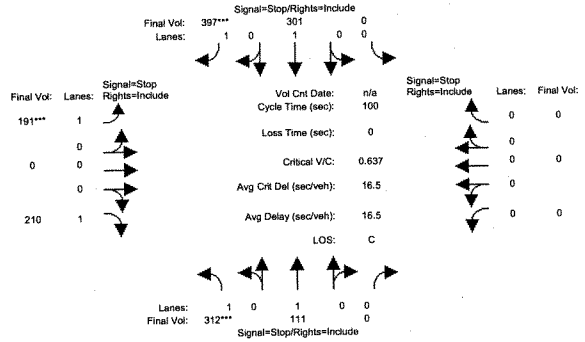
Intersection #8: Sierra Point Pkwy and Lagoon Wy



Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	293	85	0	0	189	407	182	0	152	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	293	85	0	0	189	407	182	0	152	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	293	85	0	0	189	407	182	0	152	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	293	85	0	0	189	407	182	0	152	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	293	85	0	0	189	407	182	0	152	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	293	85	0	0	189	407	182	0	152	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	524	558	0	0	580	659	480	0	569	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.56	0.15	xxxx	xxxx	0.33	0.62	0.38	xxxx	0.27	xxxx	xxxx	xxxx
Crit Moves:	****					****	****					
Delay/Veh:	17.3	10.0	0.0	0.0	11.6	16.0	14.0	0.0	10.7	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.3	10.0	0.0	0.0	11.6	16.0	14.0	0.0	10.7	0.0	0.0	0.0
LOS by Move:	C	B	*	*	B	C	B	*	B	*	*	*
ApproachDel:		15.7			14.6			12.5			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		15.7			14.6			12.5			xxxxxx	
LOS by Appr:		C			B			B			*	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM w/proj

Intersection #8: Sierra Point Pkwy and Lagoon Wy

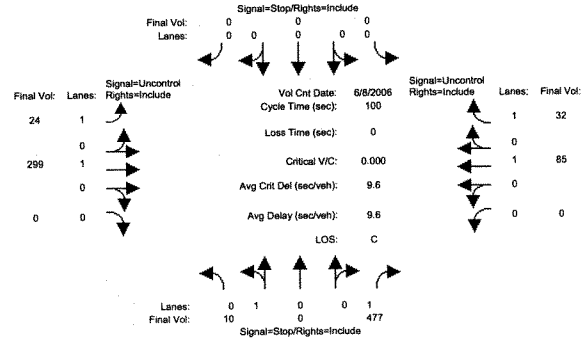


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	312	111	0	0	301	397	191	0	210	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	312	111	0	0	301	397	191	0	210	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	111	0	0	301	397	191	0	210	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	312	111	0	0	301	397	191	0	210	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	312	111	0	0	301	397	191	0	210	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	312	111	0	0	301	397	191	0	210	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	496	525	0	0	554	623	464	0	548	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.63	0.21	xxxx	xxxx	0.54	0.64	0.41	xxxx	0.38	xxxx	xxxx	xxxx
Crit Moves:	****					****	****					
Delay/Veh:	20.8	11.0	0.0	0.0	16.2	17.5	15.1	0.0	12.7	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.8	11.0	0.0	0.0	16.2	17.5	15.1	0.0	12.7	0.0	0.0	0.0
LOS by Move:	C	B	*	*	C	C	C	*	B	*	*	*
ApproachDel:		18.2			16.9			13.8			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		18.2			16.9			13.8			xxxxxx	
LOS by Appr:		C			C			B			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 8 Jun 2006 <<												
Base Vol:	10	0	477	0	0	0	24	299	0	0	85	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	0	477	0	0	0	24	299	0	0	85	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	477	0	0	0	24	299	0	0	85	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	0	477	0	0	0	24	299	0	0	85	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	10	0	477	0	0	0	24	299	0	0	85	32
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	448	xxxx	299	xxxx	xxxx	xxxxx	117	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	572	xxxx	745	xxxx	xxxx	xxxxx	1484	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	565	xxxx	745	xxxx	xxxx	xxxxx	1484	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	0.64	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	4.7	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	18.0	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	565	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	11.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	17.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1
Final Vol.:	10		0	477		0	0		0	24	299		0	0	85		32	
ApproachDel:	17.9			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=2.4]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=487]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=927]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

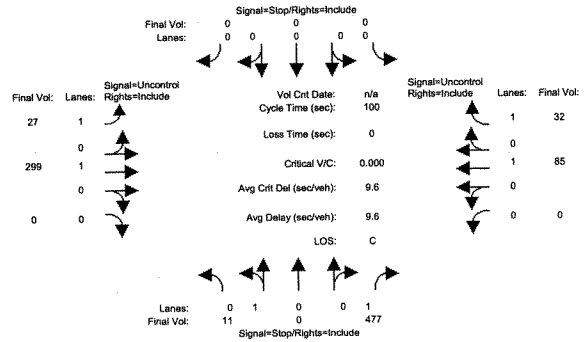
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1
Final Vol.:	10		0	477		0	0		0	24	299		0	0	85		32	

Major Street Volume: 440
Minor Approach Volume: 487
Minor Approach Volume Threshold: 727

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Bkgrd AM

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	11	0	477	0	0	0	27	299	0	0	85	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	477	0	0	0	27	299	0	0	85	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	477	0	0	0	27	299	0	0	85	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	477	0	0	0	27	299	0	0	85	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	11	0	477	0	0	0	27	299	0	0	85	32
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	454	xxxx	299	xxxx	xxxx	xxxxx	117	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	568	xxxx	745	xxxx	xxxx	xxxxx	1484	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	560	xxxx	745	xxxx	xxxx	xxxxx	1484	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	0.64	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	4.7	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	18.0	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	560	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	11.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	17.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Peak Hour Delay Signal Warrant Report

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Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1
Final Vol.:	11	0	477	0	0	0	27	299	0	0	85	32
ApproachDel:	17.9			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=2.4]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=488]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=931]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

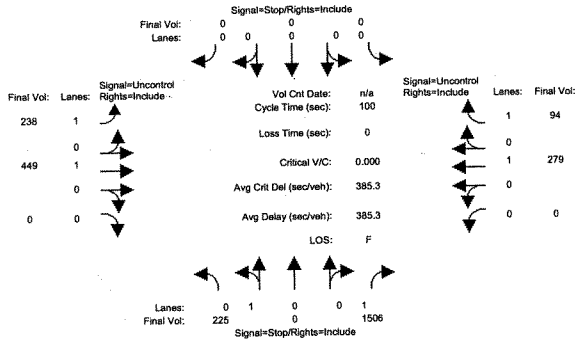
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1
Final Vol.:	11	0	477	0	0	0	27	299	0	0	85	32

Major Street Volume:	443
Minor Approach Volume:	488
Minor Approach Volume Threshold:	724

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum AM w/proj

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	225	0	1506	0	0	0	238	449	0	0	279	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	225	0	1506	0	0	0	238	449	0	0	279	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	225	0	1506	0	0	0	238	449	0	0	279	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	225	0	1506	0	0	0	238	449	0	0	279	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	225	0	1506	0	0	0	238	449	0	0	279	94
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1251	xxxx	449	xxxx	xxxx	xxxxx	373	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	192	xxxx	614	xxxx	xxxx	xxxxx	1197	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	163	xxxx	614	xxxx	xxxx	xxxxx	1197	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	1.38	xxxx	2.45	xxxx	xxxx	xxxx	0.20	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	116.3	xxxxx	xxxx	xxxxx	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	674.1	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	F	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	163	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	13.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	258.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	F	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	620.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Peak Hour Delay Signal Warrant Report

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Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1
Final Vol.:	225		0	1506			0		0	0			238	449		0		0	279	94
ApproachDel:	620.0			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=298.1]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=1731]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2791]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

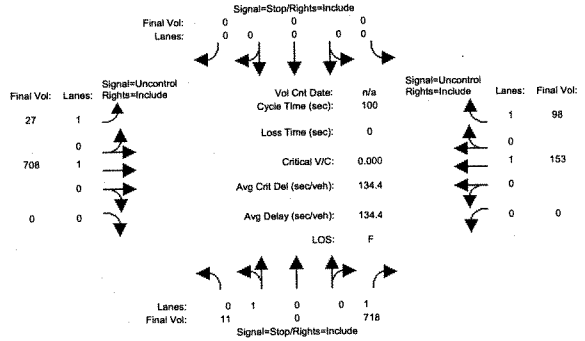
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1
Final Vol.:	225		0	1506			0		0	0			238	449		0		0	279	94

Major Street Volume: 1060
Minor Approach Volume: 1731
Minor Approach Volume Threshold: 349

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	11	0	718	0	0	0	27	708	0	0	153	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	718	0	0	0	27	708	0	0	153	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	718	0	0	0	27	708	0	0	153	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	718	0	0	0	27	708	0	0	153	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	11	0	718	0	0	0	27	708	0	0	153	98
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	964	xxxx	708	xxxx	xxxx	xxxxx	251	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	286	xxxx	438	xxxx	xxxx	xxxxx	1326	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	281	xxxx	438	xxxx	xxxx	xxxxx	1326	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.04	xxxx	1.64	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	41.5	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	320.4	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	F	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	281	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	18.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	C	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	315.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Peak Hour Delay Signal Warrant Report

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Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	1	0	1
Final Vol.:	11	0	718	0	0	0	27	708	0	0	153	98
ApproachDel:	315.9			xxxxxx			xxxxxx			xxxxxx		

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	1	0	1
Final Vol.:	11	0	718	0	0	0	27	708	0	0	153	98
ApproachDel:	315.9			xxxxxx			xxxxxx			xxxxxx		

```
Approach[northbound][lanes=2]{control=Stop}
Signal Warrant Rule #1: [vehicle-hours=64.0]
   SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=729]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1715]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
```

Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

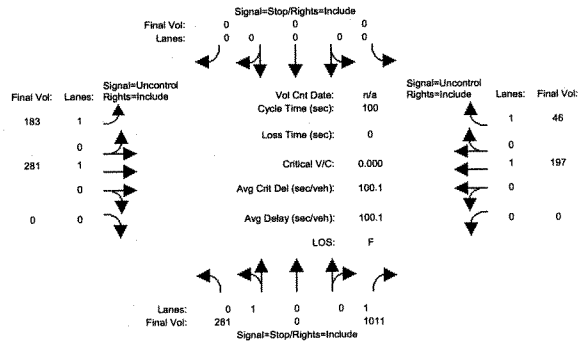
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	1	0	1
Final Vol.:	11	0	718	0	0	0	27	708	0	0	153	98

```
Major Street Volume:                986
Minor Approach Volume:              729
Minor Approach Volume Threshold: 380
```

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum AM w/o proj

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	281	0	1011	0	0	0	183	281	0	0	197	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	281	0	1011	0	0	0	183	281	0	0	197	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	281	0	1011	0	0	0	183	281	0	0	197	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	281	0	1011	0	0	0	183	281	0	0	197	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	281	0	1011	0	0	0	183	281	0	0	197	46
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	867	xxxx	281	xxxx	xxxx	xxxxx	243	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	326	xxxx	763	xxxx	xxxx	xxxxx	1335	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	292	xxxx	763	xxxx	xxxx	xxxxx	1335	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.96	xxxx	1.33	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	40.4	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	173.4	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	F	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	292	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	82.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	F	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	153.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1
Final Vol.:	281		0	1011		0	0		0	183	281		0	0	197		46
ApproachDel:	153.7			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=55.2]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=1292]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1999]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

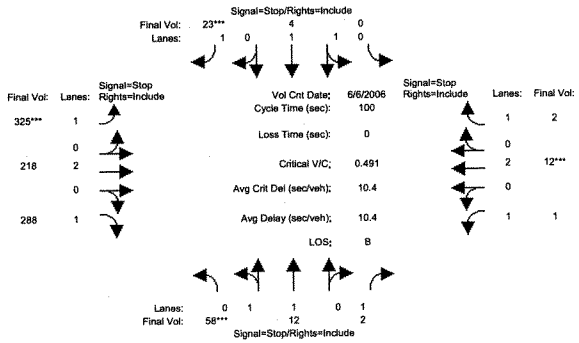
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1
Final Vol.:	281		0	1011		0	0		0	183	281		0	0	197		46

Major Street Volume: 707
Minor Approach Volume: 1292
Minor Approach Volume Threshold: 523

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #10: Sierra Point Pkwy and Shoreline Ct

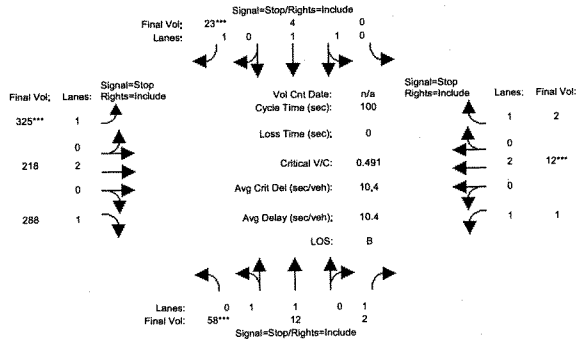


Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 6 Jun 2006 <<												
Base Vol:	58	12	2	0	4	23	325	218	288	1	12	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	12	2	0	4	23	325	218	288	1	12	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	12	2	0	4	23	325	218	288	1	12	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	12	2	0	4	23	325	218	288	1	12	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	12	2	0	4	23	325	218	288	1	12	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	58	12	2	0	4	23	325	218	288	1	12	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	490	525	584	0	1023	569	662	1456	849	503	1083	605
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.00	xxxx	0.00	0.04	0.49	0.15	0.34	0.00	0.01	0.00
Crit Moves:	****					****	****				****	
Delay/Veh:	10.4	9.2	8.4	0.0	9.2	8.7	13.1	8.4	9.0	9.4	9.0	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	9.2	8.4	0.0	9.2	8.7	13.1	8.4	9.0	9.4	9.0	8.2
LOS by Move:	B	A	A	*	A	A	B	A	A	A	A	A
ApproachDel:		10.2			8.8			10.5			8.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.2			8.8			10.5			8.9	
LOS by Appr:		B			A			B			A	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Bkgrd AM

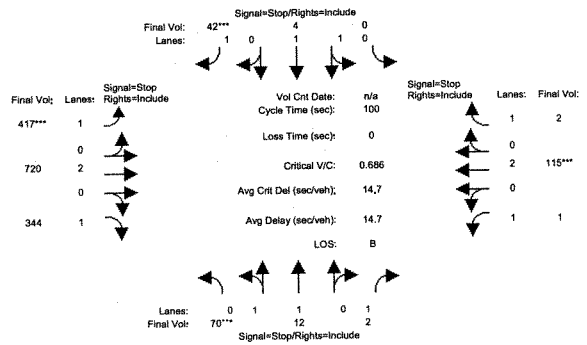
Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	58	12	2	0	4	23	325	218	288	1	12	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	12	2	0	4	23	325	218	288	1	12	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	12	2	0	4	23	325	218	288	1	12	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	12	2	0	4	23	325	218	288	1	12	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	12	2	0	4	23	325	218	288	1	12	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	58	12	2	0	4	23	325	218	288	1	12	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	490	525	584	0	1023	569	662	1456	849	503	1083	605
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.00	xxxx	0.00	0.04	0.49	0.15	0.34	0.00	0.01	0.00
Crit Moves:	****					****	****				****	
Delay/Veh:	10.4	9.2	8.4	0.0	9.2	8.7	13.1	8.4	9.0	9.4	9.0	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	9.2	8.4	0.0	9.2	8.7	13.1	8.4	9.0	9.4	9.0	8.2
LOS by Move:	B	A	A	*	A	A	B	A	A	A	A	A
ApproachDel:		10.2			8.8			10.5			8.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.2			8.8			10.5			8.9	
LOS by Appr:		B			A			B			A	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project AM

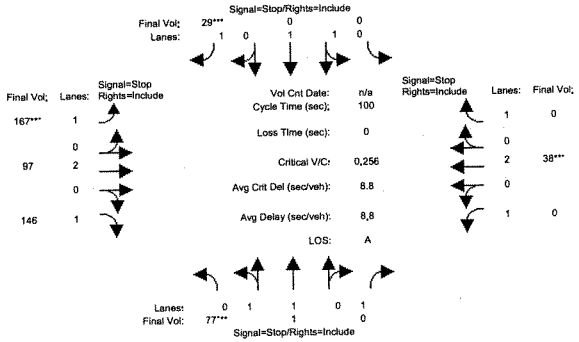
Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	70	12	2	0	4	42	417	720	344	1	115	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	12	2	0	4	42	417	720	344	1	115	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	70	12	2	0	4	42	417	720	344	1	115	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	12	2	0	4	42	417	720	344	1	115	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	12	2	0	4	42	417	720	344	1	115	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	70	12	2	0	4	42	417	720	344	1	115	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	400	420	457	0	812	444	608	1323	759	424	907	494
Capacity Analysis Module:												
Vol/Sat:	0.17	0.03	0.00	xxxx	0.00	0.09	0.69	0.54	0.45	0.00	0.13	0.00
Crit Moves:	****					****	****				****	
Delay/Veh:	12.5	10.6	9.8	0.0	10.6	10.5	20.3	14.2	11.2	10.6	11.0	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.5	10.6	9.8	0.0	10.6	10.5	20.3	14.2	11.2	10.6	11.0	9.4
LOS by Move:	B	B	A	*	B	B	C	B	B	B	B	A
ApproachDel:		12.2			10.5			15.2			11.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.2			10.5			15.2			11.0	
LOS by Appr:		B			B			C			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM w/o proj

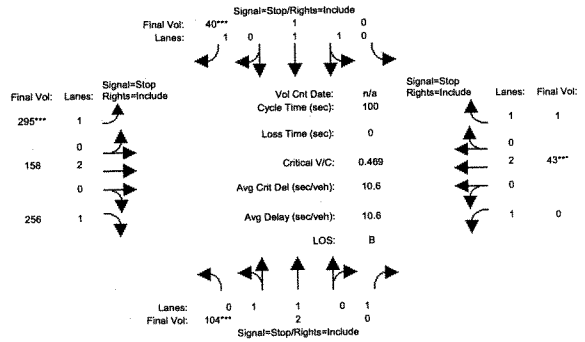
Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	77	1	0	0	0	29	167	97	146	0	38	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	1	0	0	0	29	167	97	146	0	38	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	1	0	0	0	29	167	97	146	0	38	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	1	0	0	0	29	167	97	146	0	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	1	0	0	0	29	167	97	146	0	38	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	77	1	0	0	0	29	167	97	146	0	38	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	553	598	676	0	1161	656	652	1429	832	563	1222	692
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.00	xxxx	0.00	0.04	0.26	0.07	0.18	0.00	0.03	0.00
Crit Moves:	****					****	****				****	
Delay/Veh:	9.8	8.4	0.0	0.0	0.0	8.0	10.0	8.0	7.8	0.0	8.5	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	8.4	0.0	0.0	0.0	8.0	10.0	8.0	7.8	0.0	8.5	0.0
LOS by Move:	A	A	*	*	*	A	A	A	A	*	A	*
ApproachDel:		9.8			8.0			8.7			8.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.8			8.0			8.7			8.5	
LOS by Appr:		A			A			A			A	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum AM w/proj

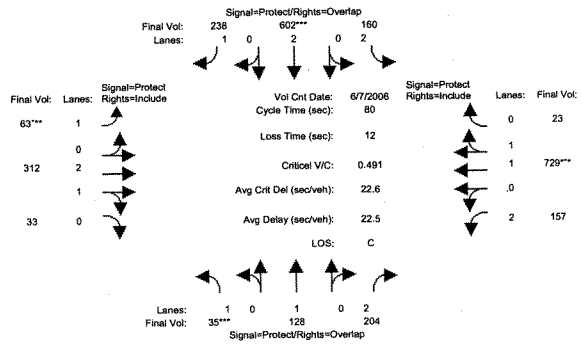
Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	104	2	0	0	1	40	295	158	256	0	43	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	2	0	0	1	40	295	158	256	0	43	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	104	2	0	0	1	40	295	158	256	0	43	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	2	0	0	1	40	295	158	256	0	43	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	2	0	0	1	40	295	158	256	0	43	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	104	2	0	0	1	40	295	158	256	0	43	1
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	494	528	588	0	1019	567	630	1375	795	499	1074	599
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.00	xxxx	0.00	0.07	0.47	0.11	0.32	0.00	0.04	0.00
Crit Moves:	****					****	****				****	
Delay/Veh:	11.2	9.1	0.0	0.0	9.2	8.9	13.1	8.5	9.2	0.0	9.2	8.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	9.1	0.0	0.0	9.2	8.9	13.1	8.5	9.2	0.0	9.2	8.3
LOS by Move:	B	A	*	*	A	A	B	A	A	*	A	A
ApproachDel:		11.2			8.9			10.7			9.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.2			8.9			10.7			9.2	
LOS by Appr:		B			A			B			A	

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #1: Bayshore Blvd and Oyster Point Blvd

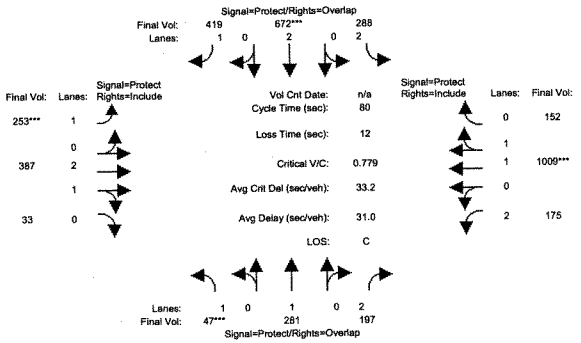


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 7 Jun 2006 <<												
Base Vol:	35	128	204	160	602	238	63	312	33	157	729	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	128	204	160	602	238	63	312	33	157	729	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	128	204	160	602	238	63	312	33	157	729	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	128	204	160	602	238	63	312	33	157	729	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	128	204	160	602	238	63	312	33	157	729	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	35	128	204	160	602	238	63	312	33	157	729	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	0.97	0.95
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.70	0.30	2.00	1.94	0.06
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5064	536	3150	3587	113
Capacity Analysis Module:												
Vol/Sat:	0.02	0.07	0.06	0.05	0.16	0.14	0.04	0.06	0.06	0.05	0.20	0.20
Crit Moves:	****				****		****				****	
Green Time:	7.0	18.0	33.4	12.6	23.7	30.7	7.0	22.0	22.0	15.4	30.3	30.3
Volume/Cap:	0.23	0.30	0.16	0.32	0.54	0.35	0.41	0.22	0.22	0.26	0.54	0.54
Delay/Veh:	34.8	26.1	14.6	30.3	24.1	17.9	36.3	22.5	22.5	27.7	19.7	19.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.8	26.1	14.6	30.3	24.1	17.9	36.3	22.5	22.5	27.7	19.7	19.7
DesignQueue:	1	4	5	6	20	7	3	10	1	6	21	1

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd PM

Intersection #1: Bayshore Blvd and Oyster Point Blvd

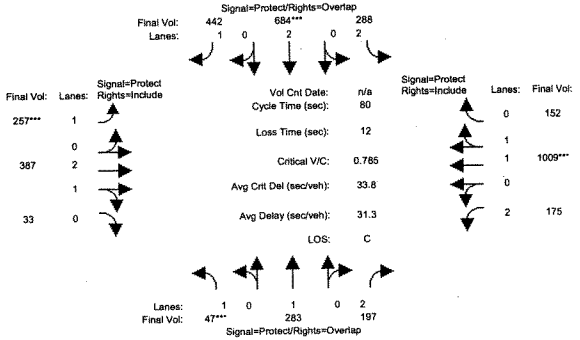


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	47	281	197	288	672	419	253	387	33	175	1009	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	281	197	288	672	419	253	387	33	175	1009	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	281	197	288	672	419	253	387	33	175	1009	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	281	197	288	672	419	253	387	33	175	1009	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	281	197	288	672	419	253	387	33	175	1009	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	281	197	288	672	419	253	387	33	175	1009	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.76	0.24	2.00	1.73	0.27
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5159	440	3150	3215	484
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.06	0.09	0.18	0.24	0.14	0.08	0.08	0.06	0.31	0.31
Crit Moves:	****				****		****				****	
Green Time:	7.0	14.8	32.9	9.2	17.0	30.9	13.9	25.9	25.9	18.1	30.1	30.1
Volume/Cap:	0.31	0.80	0.15	0.80	0.83	0.62	0.83	0.23	0.23	0.25	0.83	0.83
Delay/Veh:	35.4	43.3	14.8	46.4	37.6	21.6	49.5	19.8	19.8	25.5	27.1	27.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	43.3	14.8	46.4	37.6	21.6	49.5	19.8	19.8	25.5	27.1	27.1
DesignQueue:	2	11	5	12	25	12	10	12	1	6	30	5

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #1: Bayshore Blvd and Oyster Point Blvd

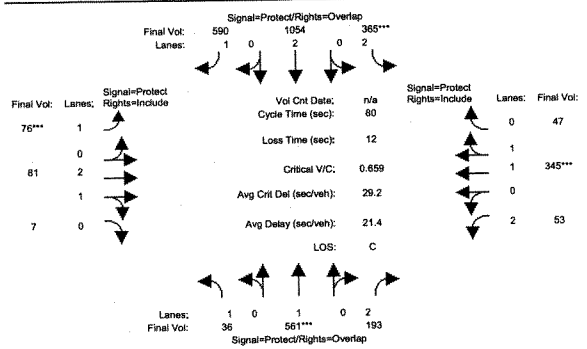


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	47	283	197	288	684	442	257	387	33	175	1009	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	283	197	288	684	442	257	387	33	175	1009	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	283	197	288	684	442	257	387	33	175	1009	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	283	197	288	684	442	257	387	33	175	1009	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	283	197	288	684	442	257	387	33	175	1009	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	283	197	288	684	442	257	387	33	175	1009	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.76	0.24	2.00	1.73	0.27
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5159	440	3150	3215	484
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.06	0.09	0.18	0.25	0.15	0.08	0.08	0.06	0.31	0.31
Crit Moves:	****				****		****				****	
Green Time:	7.0	15.0	33.0	9.2	17.1	31.1	14.0	25.8	25.8	18.1	29.9	29.9
Volume/Cap:	0.31	0.80	0.15	0.80	0.84	0.65	0.84	0.23	0.23	0.25	0.84	0.84
Delay/Veh:	35.4	42.9	14.8	46.2	37.9	22.2	50.3	19.9	19.9	25.6	27.7	27.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	42.9	14.8	46.2	37.9	22.2	50.3	19.9	19.9	25.6	27.7	27.7
DesignQueue:	2	11	5	12	25	13	10	12	1	6	31	5

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/o proj

Intersection #1: Bayshore Blvd and Oyster Point Blvd

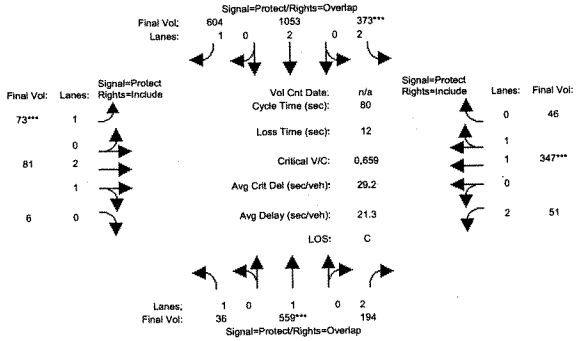


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	36	561	193	365	1054	590	76	81	7	53	345	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	561	193	365	1054	590	76	81	7	53	345	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	561	193	365	1054	590	76	81	7	53	345	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	561	193	365	1054	590	76	81	7	53	345	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	561	193	365	1054	590	76	81	7	53	345	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	561	193	365	1054	590	76	81	7	53	345	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.75	0.25	2.00	1.75	0.25
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5154	445	3150	3256	444
Capacity Analysis Module:												
Vol/Sat:	0.02	0.30	0.06	0.12	0.28	0.34	0.04	0.02	0.02	0.02	0.11	0.11
Crit Moves:		****		****			****				****	
Green Time:	11.1	34.8	42.9	13.7	37.4	44.4	7.0	11.5	11.5	8.0	12.5	12.5
Volume/Cap:	0.15	0.68	0.11	0.68	0.59	0.61	0.50	0.11	0.11	0.17	0.68	0.68
Delay/Veh:	30.5	20.4	9.2	34.6	16.3	13.1	37.3	29.9	29.9	33.2	35.1	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.5	20.4	9.2	34.6	16.3	13.1	37.3	29.9	29.9	33.2	35.1	35.1
DesignQueue:	1	15	4	14	27	13	3	3	0	2	13	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/proj

Intersection #1: Bayshore Blvd and Oyster Point Blvd

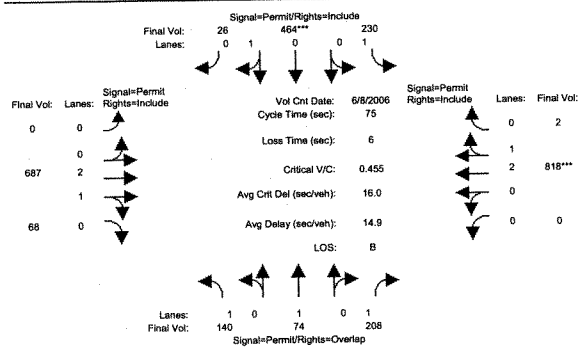


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	36	559	194	373	1053	604	73	81	6	51	347	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	559	194	373	1053	604	73	81	6	51	347	46
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	559	194	373	1053	604	73	81	6	51	347	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	559	194	373	1053	604	73	81	6	51	347	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	559	194	373	1053	604	73	81	6	51	347	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	559	194	373	1053	604	73	81	6	51	347	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.79	0.21	2.00	1.76	0.24
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5213	386	3150	3267	433
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.06	0.12	0.28	0.35	0.04	0.02	0.02	0.02	0.11	0.11
Crit Moves:		****		****			****				****	
Green Time:	10.9	34.6	42.6	13.9	37.7	44.7	7.0	11.5	11.5	8.0	12.5	12.5
Volume/Cap:	0.15	0.68	0.12	0.68	0.59	0.62	0.48	0.11	0.11	0.16	0.68	0.68
Delay/Veh:	30.8	20.6	9.3	34.4	16.0	13.1	37.1	29.9	29.9	33.2	35.2	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	20.6	9.3	34.4	16.0	13.1	37.1	29.9	29.9	33.2	35.2	35.2
DesignQueue:	1	15	4	14	27	13	3	3	0	2	13	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #2: Alemany Blvd and Congdon St

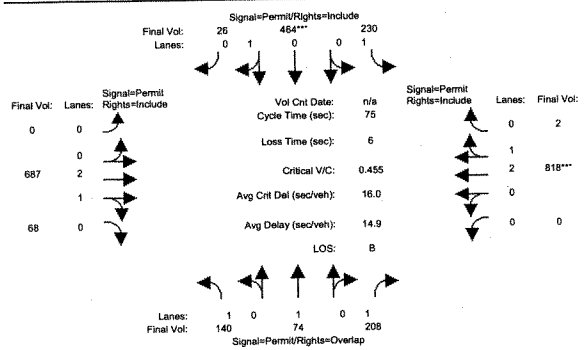


Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 8 Jun 2006 <<												
Base Vol:	140	74	208	230	464	26	0	687	68	0	818	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	74	208	230	464	26	0	687	68	0	818	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	74	208	230	464	26	0	687	68	0	818	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	74	208	230	464	26	0	687	68	0	818	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	74	208	230	464	26	0	687	68	0	818	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	74	208	230	464	26	0	687	68	0	818	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.95	0.05	0.00	2.72	0.28	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1704	96	0	5095	504	0	5586	14
Capacity Analysis Module:												
Vol/Sat:	0.08	0.04	0.12	0.13	0.27	0.27	0.00	0.13	0.13	0.00	0.15	0.15
Crit Moves:					****						****	
Green Time:	44.9	44.9	44.9	44.9	44.9	44.9	0.0	24.1	24.1	0.0	24.1	24.1
Volume/Cap:	0.13	0.07	0.20	0.22	0.46	0.46	0.00	0.42	0.42	0.00	0.46	0.46
Delay/Veh:	6.6	6.3	7.0	7.1	8.6	8.6	0.0	20.1	20.1	0.0	20.4	20.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.6	6.3	7.0	7.1	8.6	8.6	0.0	20.1	20.1	0.0	20.4	20.4
DesignQueue:	2	1	4	4	8	0	0	20	2	0	24	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd PM

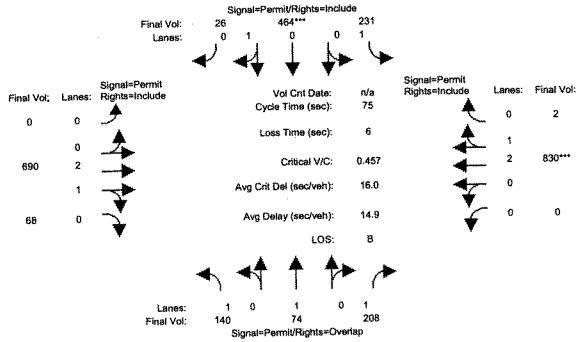
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	140	74	208	230	464	26	0	687	68	0	818	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	74	208	230	464	26	0	687	68	0	818	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	74	208	230	464	26	0	687	68	0	818	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	74	208	230	464	26	0	687	68	0	818	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	74	208	230	464	26	0	687	68	0	818	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	74	208	230	464	26	0	687	68	0	818	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.95	0.05	0.00	2.72	0.28	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1704	96	0	5095	504	0	5586	14
Capacity Analysis Module:												
Vol/Sat:	0.08	0.04	0.12	0.13	0.27	0.27	0.00	0.13	0.13	0.00	0.15	0.15
Crit Moves:					****						****	
Green Time:	44.9	44.9	44.9	44.9	44.9	44.9	0.0	24.1	24.1	0.0	24.1	24.1
Volume/Cap:	0.13	0.07	0.20	0.22	0.46	0.46	0.00	0.42	0.42	0.00	0.46	0.46
Delay/Veh:	6.6	6.3	7.0	7.1	8.6	8.6	0.0	20.1	20.1	0.0	20.4	20.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.6	6.3	7.0	7.1	8.6	8.6	0.0	20.1	20.1	0.0	20.4	20.4
DesignQueue:	2	1	4	4	8	0	0	20	2	0	24	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

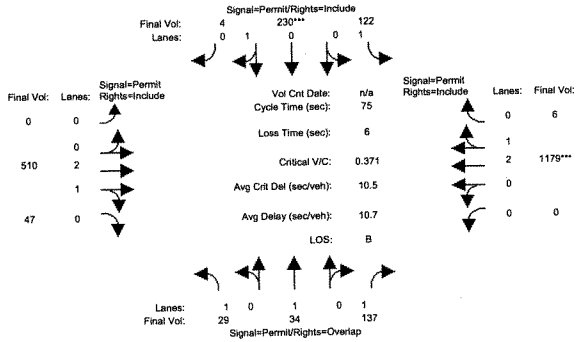
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	140	74	208	231	464	26	0	690	68	0	830	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	74	208	231	464	26	0	690	68	0	830	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	74	208	231	464	26	0	690	68	0	830	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	74	208	231	464	26	0	690	68	0	830	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	74	208	231	464	26	0	690	68	0	830	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	74	208	231	464	26	0	690	68	0	830	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.95	0.05	0.00	2.72	0.28	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1704	96	0	5097	502	0	5587	13
Capacity Analysis Module:												
Vol/Sat:	0.08	0.04	0.12	0.13	0.27	0.27	0.00	0.14	0.14	0.00	0.15	0.15
Crit Moves:					****						****	
Green Time:	44.6	44.6	44.6	44.6	44.6	44.6	0.0	24.4	24.4	0.0	24.4	24.4
Volume/Cap:	0.13	0.07	0.20	0.22	0.46	0.46	0.00	0.42	0.42	0.00	0.46	0.46
Delay/Veh:	6.7	6.4	7.1	7.2	8.8	8.8	0.0	19.9	19.9	0.0	20.3	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.7	6.4	7.1	7.2	8.8	8.8	0.0	19.9	19.9	0.0	20.3	20.3
DesignQueue:	2	1	4	4	8	0	0	20	2	0	24	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/o proj

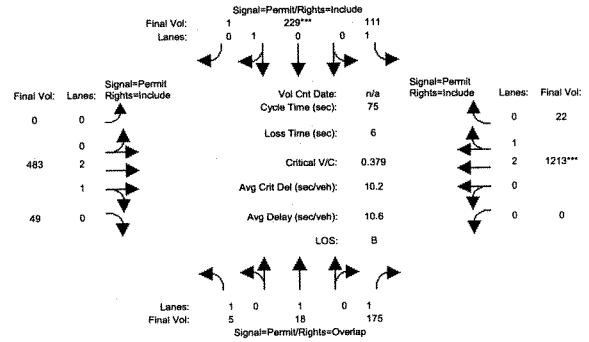
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	29	34	137	122	230	4	0	510	47	0	1179	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	34	137	122	230	4	0	510	47	0	1179	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	34	137	122	230	4	0	510	47	0	1179	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	34	137	122	230	4	0	510	47	0	1179	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	34	137	122	230	4	0	510	47	0	1179	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	29	34	137	122	230	4	0	510	47	0	1179	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.98	0.02	0.00	2.74	0.26	0.00	2.98	0.02
Final Sat.:	1750	1900	1750	1750	1769	31	0	5127	472	0	5572	28
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.08	0.07	0.13	0.13	0.00	0.10	0.10	0.00	0.21	0.21
Crit Moves:					****						****	
Green Time:	26.3	26.3	26.3	26.3	26.3	26.3	0.0	42.7	42.7	0.0	42.7	42.7
Volume/Cap:	0.05	0.05	0.22	0.20	0.37	0.37	0.00	0.17	0.17	0.00	0.37	0.37
Delay/Veh:	16.1	16.2	17.4	17.2	18.6	18.6	0.0	7.7	7.7	0.0	8.9	8.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.1	16.2	17.4	17.2	18.6	18.6	0.0	7.7	7.7	0.0	8.9	8.9
DesignQueue:	1	1	4	3	6	0	0	9	1	0	22	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/proj

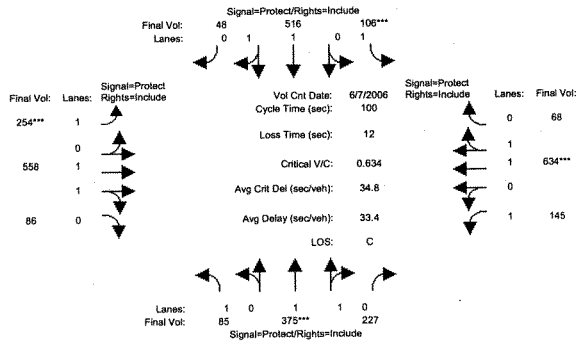
Intersection #2: Alemany Blvd and Congdon St



Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	5	18	175	111	229	1	0	483	49	0	1213	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	18	175	111	229	1	0	483	49	0	1213	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	18	175	111	229	1	0	483	49	0	1213	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	18	175	111	229	1	0	483	49	0	1213	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	18	175	111	229	1	0	483	49	0	1213	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	18	175	111	229	1	0	483	49	0	1213	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.99	0.01	0.00	2.71	0.29	0.00	2.94	0.06
Final Sat.:	1750	1900	1750	1750	1792	8	0	5084	516	0	5500	100
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.10	0.06	0.13	0.13	0.00	0.10	0.10	0.00	0.22	0.22
Crit Moves:					****						****	
Green Time:	25.3	25.3	25.3	25.3	25.3	25.3	0.0	43.7	43.7	0.0	43.7	43.7
Volume/Cap:	0.01	0.03	0.30	0.19	0.38	0.38	0.00	0.16	0.16	0.00	0.38	0.38
Delay/Veh:	16.5	16.6	18.6	17.7	19.3	19.3	0.0	7.2	7.2	0.0	8.5	8.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.5	16.6	18.6	17.7	19.3	19.3	0.0	7.2	7.2	0.0	8.5	8.5
DesignQueue:	0	0	5	3	7	0	0	9	1	0	22	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3: Alemany Blvd and Geneva Ave

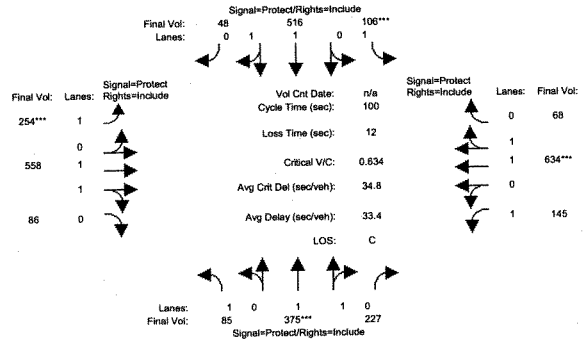


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 7 Jun 2006 <<												
Base Vol:	85	375	227	106	516	48	254	558	86	145	634	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	375	227	106	516	48	254	558	86	145	634	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	375	227	106	516	48	254	558	86	145	634	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	375	227	106	516	48	254	558	86	145	634	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	375	227	106	516	48	254	558	86	145	634	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	85	375	227	106	516	48	254	558	86	145	634	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.23	0.77	1.00	1.83	0.17	1.00	1.73	0.27	1.00	1.80	0.20
Final Sat.:	1750	2304	1395	1750	3385	315	1750	3206	494	1750	3341	358
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.06	0.15	0.15	0.15	0.17	0.17	0.08	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	11.1	25.7	25.7	9.5	24.1	24.1	22.9	35.8	35.8	17.0	29.9	29.9
Volume/Cap:	0.44	0.63	0.63	0.63	0.63	0.63	0.63	0.49	0.49	0.49	0.63	0.63
Delay/Veh:	43.1	34.4	34.4	51.3	35.4	35.4	38.1	25.3	25.3	38.8	31.5	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.1	34.4	34.4	51.3	35.4	35.4	38.1	25.3	25.3	38.8	31.5	31.5
DesignQueue:	4	16	10	5	23	2	11	21	3	7	26	3

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd PM

Intersection #3: Alemany Blvd and Geneva Ave

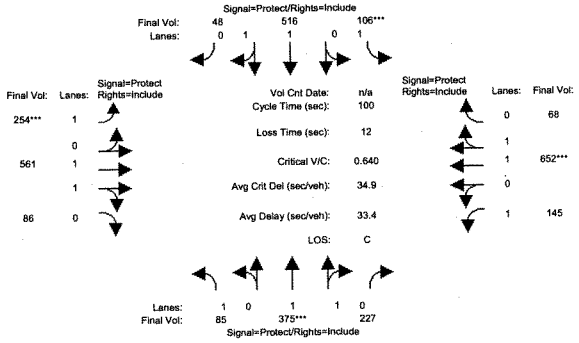


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	85	375	227	106	516	48	254	558	86	145	634	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	375	227	106	516	48	254	558	86	145	634	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	375	227	106	516	48	254	558	86	145	634	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	375	227	106	516	48	254	558	86	145	634	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	375	227	106	516	48	254	558	86	145	634	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	85	375	227	106	516	48	254	558	86	145	634	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.23	0.77	1.00	1.83	0.17	1.00	1.73	0.27	1.00	1.80	0.20
Final Sat.:	1750	2304	1395	1750	3385	315	1750	3206	494	1750	3341	358
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.06	0.15	0.15	0.15	0.17	0.17	0.08	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	11.1	25.7	25.7	9.5	24.1	24.1	22.9	35.8	35.8	17.0	29.9	29.9
Volume/Cap:	0.44	0.63	0.63	0.63	0.63	0.63	0.63	0.49	0.49	0.49	0.63	0.63
Delay/Veh:	43.1	34.4	34.4	51.3	35.4	35.4	38.1	25.3	25.3	38.8	31.5	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.1	34.4	34.4	51.3	35.4	35.4	38.1	25.3	25.3	38.8	31.5	31.5
DesignQueue:	4	16	10	5	23	2	11	21	3	7	26	3

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #3: Alemany Blvd and Geneva Ave

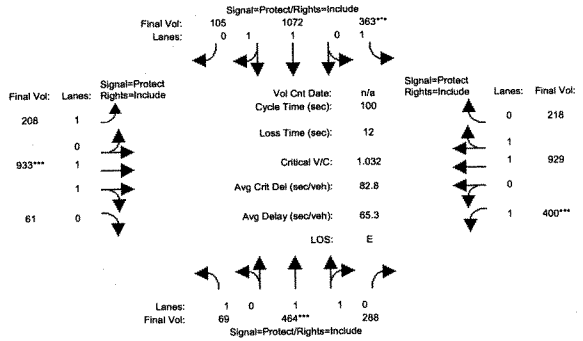


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	85	375	227	106	516	48	254	561	86	145	652	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	375	227	106	516	48	254	561	86	145	652	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	375	227	106	516	48	254	561	86	145	652	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	375	227	106	516	48	254	561	86	145	652	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	375	227	106	516	48	254	561	86	145	652	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	85	375	227	106	516	48	254	561	86	145	652	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.23	0.77	1.00	1.83	0.17	1.00	1.73	0.27	1.00	1.81	0.19
Final Sat.:	1750	2304	1395	1750	3385	315	1750	3208	492	1750	3350	349
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.06	0.15	0.15	0.15	0.17	0.17	0.08	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	11.0	25.4	25.4	9.5	23.9	23.9	22.7	36.0	36.0	17.1	30.4	30.4
Volume/Cap:	0.44	0.64	0.64	0.64	0.64	0.64	0.64	0.49	0.49	0.49	0.64	0.64
Delay/Veh:	43.3	34.7	34.7	51.8	35.7	35.7	38.5	25.1	25.1	38.7	31.3	31.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	34.7	34.7	51.8	35.7	35.7	38.5	25.1	25.1	38.7	31.3	31.3
DesignQueue:	4	16	10	5	23	2	11	21	3	7	27	3

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/o proj

Intersection #3: Alemany Blvd and Geneva Ave

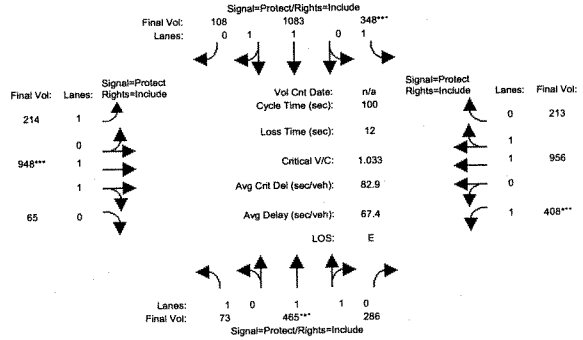


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	69	464	288	363	1072	105	208	933	61	400	929	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	464	288	363	1072	105	208	933	61	400	929	218
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	464	288	363	1072	105	208	933	61	400	929	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	464	288	363	1072	105	208	933	61	400	929	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	464	288	363	1072	105	208	933	61	400	929	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	69	464	288	363	1072	105	208	933	61	400	929	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.21	0.79	1.00	1.82	0.18	1.00	1.87	0.13	1.00	1.61	0.39
Final Sat.:	1750	2282	1416	1750	3370	330	1750	3473	227	1750	2996	703
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.21	0.32	0.32	0.12	0.27	0.27	0.23	0.31	0.31
Crit Moves:		****		****				****		****		
Green Time:	7.2	19.7	19.7	20.1	32.6	32.6	13.4	26.0	26.0	22.2	34.8	34.8
Volume/Cap:	0.55	1.03	1.03	1.03	0.97	0.97	0.89	1.03	1.03	1.03	0.89	0.89
Delay/Veh:	49.9	81.9	81.9	96.4	53.3	53.3	74.0	74.5	74.5	93.1	38.8	38.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.9	81.9	81.9	96.4	53.3	53.3	74.0	74.5	74.5	93.1	38.8	38.8
DesignQueue:	4	22	14	17	44	4	10	41	3	18	37	9

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/proj

Intersection #3: Alemany Blvd and Geneva Ave

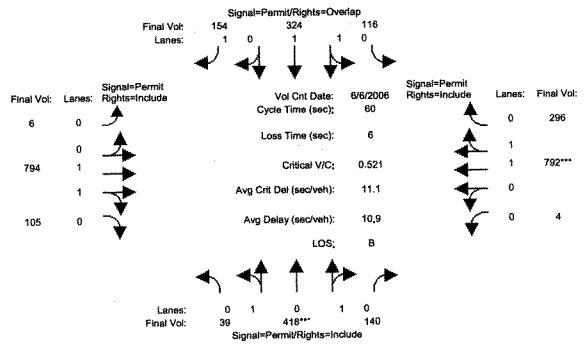


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	73	465	286	348	1083	108	214	948	65	408	956	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	465	286	348	1083	108	214	948	65	408	956	213
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	465	286	348	1083	108	214	948	65	408	956	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	465	286	348	1083	108	214	948	65	408	956	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	465	286	348	1083	108	214	948	65	408	956	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	73	465	286	348	1083	108	214	948	65	408	956	213
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.22	0.78	1.00	1.81	0.19	1.00	1.87	0.13	1.00	1.63	0.37
Final Sat.:	1750	2290	1408	1750	3364	335	1750	3462	237	1750	3025	674
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.20	0.32	0.32	0.12	0.27	0.27	0.23	0.32	0.32
Crit Moves:		****		****				****		****		
Green Time:	7.0	19.7	19.7	19.3	31.9	31.9	13.7	26.5	26.5	22.6	35.4	35.4
Volume/Cap:	0.60	1.03	1.03	1.03	1.01	1.01	0.89	1.03	1.03	1.03	0.89	0.89
Delay/Veh:	52.9	82.3	82.3	98.1	62.4	62.4	73.8	74.2	74.2	92.7	38.6	38.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.9	82.3	82.3	98.1	62.4	62.4	73.8	74.2	74.2	92.7	38.6	38.6
DesignQueue:	4	22	13	16	45	4	11	42	3	19	37	8

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #4: Mission St and Geneva Ave

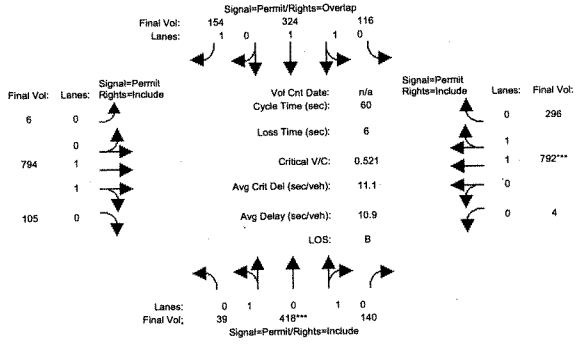


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 6 Jun 2006 <<												
Base Vol:	39	418	140	116	324	154	6	794	105	4	792	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	418	140	116	324	154	6	794	105	4	792	296
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	418	140	116	324	154	6	794	105	4	792	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	418	140	116	324	154	6	794	105	4	792	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	418	140	116	324	154	6	794	105	4	792	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	39	418	140	116	324	154	6	794	105	4	792	296
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.13	1.40	0.47	0.54	1.46	1.00	0.01	1.76	0.23	0.01	1.45	0.54
Final Sat.:	235	2521	844	975	2724	1750	24	3158	418	13	2611	976
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.12	0.12	0.09	0.25	0.25	0.25	0.30	0.30	0.30
Crit Moves:		****									****	
Green Time:	19.1	19.1	19.1	19.1	19.1	19.1	34.9	34.9	34.9	34.9	34.9	34.9
Volume/Cap:	0.52	0.52	0.52	0.37	0.37	0.28	0.43	0.43	0.43	0.52	0.52	0.52
Delay/Veh:	17.2	17.2	17.2	16.0	16.0	15.6	7.1	7.1	7.1	7.8	7.8	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.2	17.2	17.2	16.0	16.0	15.6	7.1	7.1	7.1	7.8	7.8	7.8
DesignQueue:	1	10	3	3	8	4	0	12	2	0	12	4

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd PM

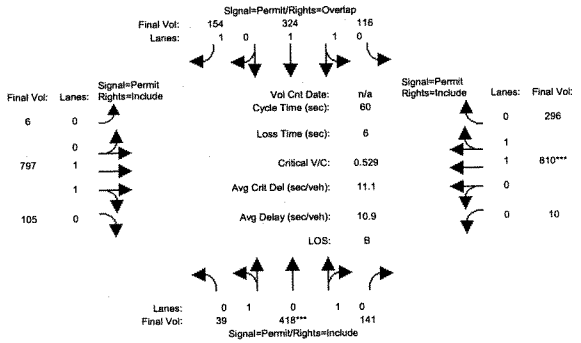
Intersection #4: Mission St and Geneva Ave



Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	39	418	140	116	324	154	6	794	105	4	792	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	418	140	116	324	154	6	794	105	4	792	296
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	418	140	116	324	154	6	794	105	4	792	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	418	140	116	324	154	6	794	105	4	792	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	418	140	116	324	154	6	794	105	4	792	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	39	418	140	116	324	154	6	794	105	4	792	296
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.13	1.40	0.47	0.54	1.46	1.00	0.01	1.76	0.23	0.01	1.45	0.54
Final Sat.:	235	2521	844	975	2724	1750	24	3158	418	13	2611	976
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.12	0.12	0.09	0.25	0.25	0.25	0.30	0.30	0.30
Crit Moves:		****									****	
Green Time:	19.1	19.1	19.1	19.1	19.1	19.1	34.9	34.9	34.9	34.9	34.9	34.9
Volume/Cap:	0.52	0.52	0.52	0.37	0.37	0.28	0.43	0.43	0.43	0.52	0.52	0.52
Delay/Veh:	17.2	17.2	17.2	16.0	16.0	15.6	7.1	7.1	7.1	7.8	7.8	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.2	17.2	17.2	16.0	16.0	15.6	7.1	7.1	7.1	7.8	7.8	7.8
DesignQueue:	1	10	3	3	8	4	0	12	2	0	12	4

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

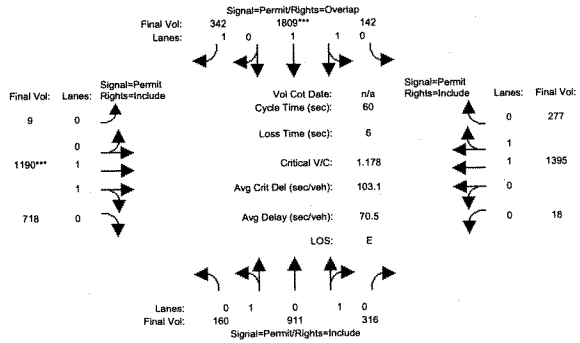
Intersection #4: Mission St and Geneva Ave



Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	39	418	141	116	324	154	6	797	105	10	810	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	418	141	116	324	154	6	797	105	10	810	296
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	418	141	116	324	154	6	797	105	10	810	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	418	141	116	324	154	6	797	105	10	810	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	418	141	116	324	154	6	797	105	10	810	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	39	418	141	116	324	154	6	797	105	10	810	296
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.13	1.40	0.47	0.54	1.46	1.00	0.01	1.76	0.23	0.02	1.45	0.53
Final Sat.:	235	2516	849	975	2724	1750	24	3160	416	32	2613	955
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.12	0.12	0.09	0.25	0.25	0.25	0.31	0.31	0.31
Crit Moves:		****									****	
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	35.2	35.2	35.2	35.2	35.2	35.2
Volume/Cap:	0.53	0.53	0.53	0.38	0.38	0.28	0.43	0.43	0.43	0.53	0.53	0.53
Delay/Veh:	17.4	17.4	17.4	16.2	16.2	15.8	7.0	7.0	7.0	7.7	7.7	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.4	17.4	17.4	16.2	16.2	15.8	7.0	7.0	7.0	7.7	7.7	7.7
DesignQueue:	1	10	3	3	8	4	0	12	2	0	12	4

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/o proj

Intersection #4: Mission St and Geneva Ave

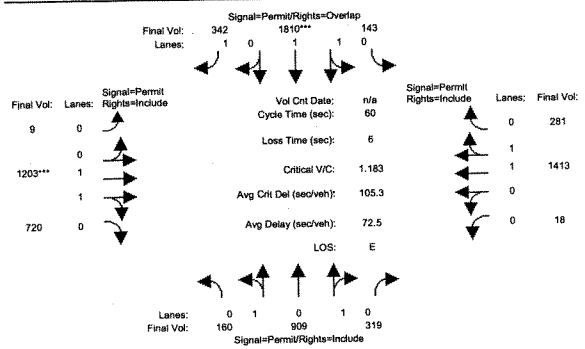


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	160	911	316	142	1809	342	9	1190	718	18	1395	277
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	911	316	142	1809	342	9	1190	718	18	1395	277
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	160	911	316	142	1809	342	9	1190	718	18	1395	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	911	316	142	1809	342	9	1190	718	18	1395	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	911	316	142	1809	342	9	1190	718	18	1395	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	160	911	316	142	1809	342	9	1190	718	18	1395	277
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.23	1.31	0.46	0.15	1.85	1.00	0.01	1.24	0.75	0.02	1.65	0.33
Final Sat.:	415	2365	820	269	3430	1750	17	2235	1348	38	2972	590
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.39	0.53	0.53	0.20	0.53	0.53	0.53	0.47	0.47	0.47
Crit Moves:					****			****				
Green Time:	26.9	26.9	26.9	26.9	26.9	26.9	27.1	27.1	27.1	27.1	27.1	27.1
Volume/Cap:	0.86	0.86	0.86	1.18	1.18	0.44	1.18	1.18	1.18	1.04	1.04	1.04
Delay/Veh:	19.8	19.8	19.8	103.1	103	11.8	103.1	103	103.1	49.3	49.3	49.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.8	19.8	19.8	103.1	103	11.8	103.1	103	103.1	49.3	49.3	49.3
DesignQueue:	3	19	6	3	39	7	0	25	15	0	29	6

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/proj

Intersection #4: Mission St and Geneva Ave

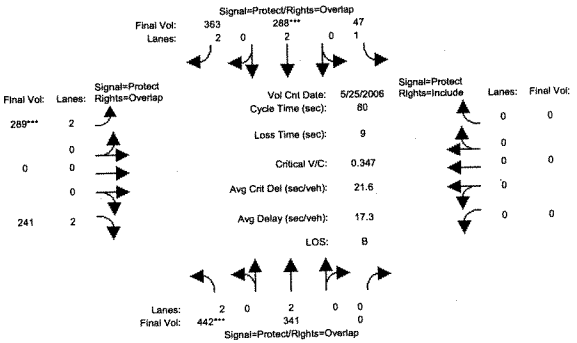


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	160	909	319	143	1810	342	9	1203	720	18	1413	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	909	319	143	1810	342	9	1203	720	18	1413	281
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	160	909	319	143	1810	342	9	1203	720	18	1413	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	909	319	143	1810	342	9	1203	720	18	1413	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	909	319	143	1810	342	9	1203	720	18	1413	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	160	909	319	143	1810	342	9	1203	720	18	1413	281
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.23	1.31	0.46	0.15	1.85	1.00	0.01	1.24	0.75	0.02	1.65	0.33
Final Sat.:	415	2358	827	271	3429	1750	17	2242	1342	38	2971	591
Capacity Analysis Module:												
Vol/Sat:	0.39	0.39	0.39	0.53	0.53	0.20	0.54	0.54	0.54	0.48	0.48	0.48
Crit Moves:					****			****				
Green Time:	26.8	26.8	26.8	26.8	26.8	26.8	27.2	27.2	27.2	27.2	27.2	27.2
Volume/Cap:	0.86	0.86	0.86	1.18	1.18	0.44	1.18	1.18	1.18	1.05	1.05	1.05
Delay/Veh:	20.1	20.1	20.1	105.4	105	11.8	105.3	105	105.3	52.5	52.5	52.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.1	20.1	20.1	105.4	105	11.8	105.3	105	105.3	52.5	52.5	52.5
DesignQueue:	3	19	7	3	39	7	0	25	15	0	29	6

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

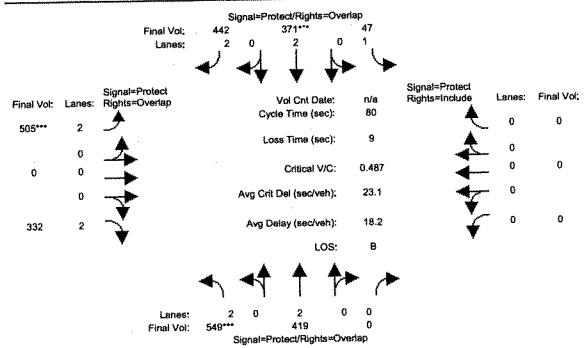
Intersection #5: Bayshore Blvd and Geneva Ave



Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module: >> Count Date: 25 May 2006 <<												
Base Vol:	442	341	0	47	288	363	289	0	241	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	442	341	0	47	288	363	289	0	241	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	442	341	0	47	288	363	289	0	241	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	442	341	0	47	288	363	289	0	241	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	442	341	0	47	288	363	289	0	241	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	442	341	0	47	288	363	289	0	241	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.09	0.00	0.03	0.08	0.12	0.09	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	32.4	29.3	0.0	20.5	17.5	38.6	21.2	0.0	53.5	0.0	0.0	0.0
Volume/Cap:	0.35	0.24	0.00	0.10	0.35	0.24	0.35	0.00	0.11	0.00	0.00	0.00
Delay/Veh:	16.7	17.7	0.0	22.8	26.7	12.2	24.1	0.0	4.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	17.7	0.0	22.8	26.7	12.2	24.1	0.0	4.8	0.0	0.0	0.0
DesignQueue:	12	10	0	2	10	9	10	0	4	0	0	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd PM

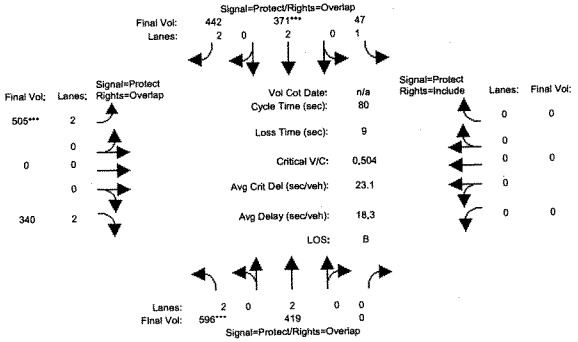
Intersection #5: Bayshore Blvd and Geneva Ave



Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	549	419	0	47	371	442	505	0	332	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	549	419	0	47	371	442	505	0	332	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	549	419	0	47	371	442	505	0	332	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	549	419	0	47	371	442	505	0	332	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	549	419	0	47	371	442	505	0	332	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	549	419	0	47	371	442	505	0	332	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.11	0.00	0.03	0.10	0.14	0.16	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	28.6	26.3	0.0	18.4	16.0	42.4	26.3	0.0	55.0	0.0	0.0	0.0
Volume/Cap:	0.49	0.34	0.00	0.12	0.49	0.26	0.49	0.00	0.15	0.00	0.00	0.00
Delay/Veh:	20.3	20.4	0.0	24.5	28.8	10.4	21.8	0.0	4.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.3	20.4	0.0	24.5	28.8	10.4	21.8	0.0	4.4	0.0	0.0	0.0
DesignQueue:	16	13	0	2	14	10	16	0	5	0	0	0

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #5: Bayshore Blvd and Geneva Ave

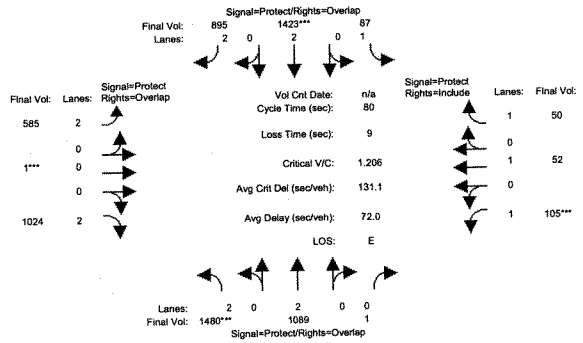


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	596	419	0	47	371	442	505	0	340	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	596	419	0	47	371	442	505	0	340	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	596	419	0	47	371	442	505	0	340	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	596	419	0	47	371	442	505	0	340	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	419	0	47	371	442	505	0	340	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	596	419	0	47	371	442	505	0	340	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.11	0.00	0.03	0.10	0.14	0.16	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	30.0	26.8	0.0	18.8	15.5	41.0	25.5	0.0	55.5	0.0	0.0	0.0
Volume/Cap:	0.50	0.33	0.00	0.11	0.50	0.27	0.50	0.00	0.16	0.00	0.00	0.00
Delay/Veh:	19.6	20.0	0.0	24.2	29.4	11.2	22.6	0.0	4.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.6	20.0	0.0	24.2	29.4	11.2	22.6	0.0	4.2	0.0	0.0	0.0
DesignQueue:	17	13	0	2	14	10	16	0	5	0	0	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/o proj

Intersection #5: Bayshore Blvd and Geneva Ave

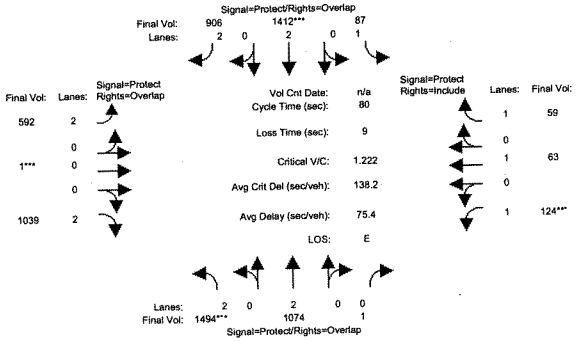


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	1480	1089	1	87	1423	895	585	1	1024	105	52	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1480	1089	1	87	1423	895	585	1	1024	105	52	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1480	1089	1	87	1423	895	585	1	1024	105	52	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1480	1089	1	87	1423	895	585	1	1024	105	52	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1480	1089	1	87	1423	895	585	1	1024	105	52	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1480	1089	1	87	1423	895	585	1	1024	105	52	50
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.97	0.95	0.92	1.00	0.83	0.93	0.95	0.94	0.92	1.00	0.92
Lanes:	2.00	1.99	0.01	1.00	2.00	2.00	1.99	0.01	2.00	1.00	1.00	1.00
Final Sat.:	3150	3697	3	1750	3800	3150	3525	6	3561	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.47	0.29	0.29	0.05	0.37	0.28	0.17	0.17	0.29	0.06	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	31.2	43.2	47.2	12.8	24.8	37.6	12.8	11.0	42.2	4.0	2.2	2.2
Volume/Cap:	1.21	0.55	0.50	0.31	1.21	0.60	1.04	1.21	0.55	1.21	0.99	1.04
Delay/Veh:	125.0	12.3	9.7	30.3	128	16.4	67.0	134	12.8	200.0	161	179.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	125.0	12.3	9.7	30.3	128	16.4	67.0	134	12.8	200.0	161	179.9
DesignQueue:	45	24	0	3	48	22	23	0	23	5	2	2

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/proj

Intersection #5: Bayshore Blvd and Geneva Ave

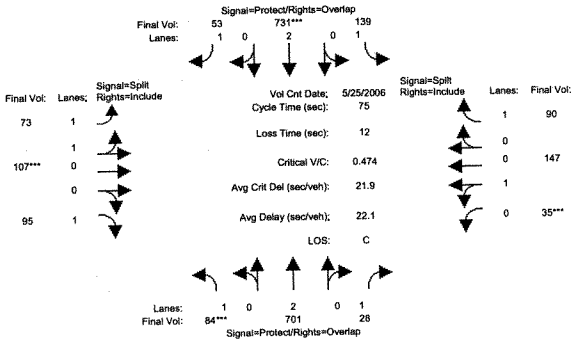


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	1494	1074	1	87	1412	906	592	1	1039	124	63	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1494	1074	1	87	1412	906	592	1	1039	124	63	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1494	1074	1	87	1412	906	592	1	1039	124	63	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1494	1074	1	87	1412	906	592	1	1039	124	63	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1494	1074	1	87	1412	906	592	1	1039	124	63	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1494	1074	1	87	1412	906	592	1	1039	124	63	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.97	0.95	0.92	1.00	0.83	0.93	0.95	0.94	0.92	1.00	0.92
Lanes:	2.00	1.99	0.01	1.00	2.00	2.00	1.99	0.01	2.00	1.00	1.00	1.00
Final Sat.:	3150	3697	3	1750	3800	3150	3525	6	3561	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.47	0.29	0.29	0.05	0.37	0.29	0.17	0.17	0.29	0.07	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	31.0	42.6	47.2	12.8	24.3	37.3	13.0	11.0	42.0	4.6	2.6	2.6
Volume/Cap:	1.22	0.55	0.49	0.31	1.22	0.62	1.03	1.22	0.56	1.22	1.02	1.03
Delay/Veh:	132.0	12.7	9.7	30.3	136	16.8	64.8	141	13.0	198.4	157	167.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	132.0	12.7	9.7	30.3	136	16.8	64.8	141	13.0	198.4	157	167.0
DesignQueue:	45	24	0	3	48	23	23	0	24	5	3	3

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #6: Bayshore Blvd and Old County Rd

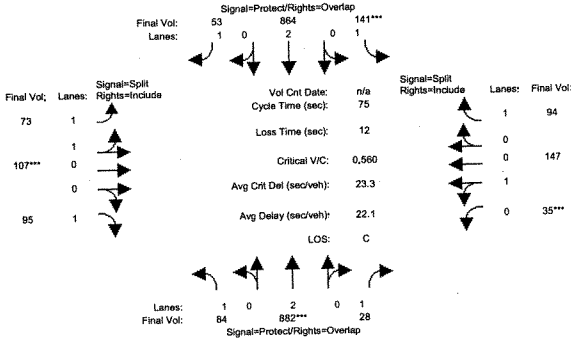


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 25 May 2006 <<												
Base Vol:	84	701	28	139	731	53	73	107	95	35	147	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	701	28	139	731	53	73	107	95	35	147	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	701	28	139	731	53	73	107	95	35	147	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	701	28	139	731	53	73	107	95	35	147	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	701	28	139	731	53	73	107	95	35	147	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	84	701	28	139	731	53	73	107	95	35	147	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.19	0.81	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	346	1454	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.02	0.08	0.19	0.03	0.04	0.06	0.05	0.10	0.10	0.05
Crit Moves:	****				****			****		****		
Green Time:	7.4	24.8	40.5	12.5	29.9	39.9	10.0	10.0	10.0	15.7	15.7	15.7
Volume/Cap:	0.48	0.56	0.03	0.48	0.48	0.06	0.31	0.42	0.41	0.48	0.48	0.25
Delay/Veh:	34.1	21.2	8.1	29.5	17.1	8.5	29.7	30.5	30.9	27.1	27.1	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.1	21.2	8.1	29.5	17.1	8.5	29.7	30.5	30.9	27.1	27.1	25.1
DesignQueue:	3	21	1	5	19	1	3	4	3	1	5	3

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgrd PM

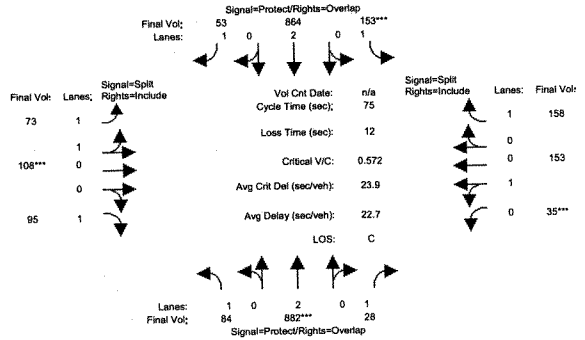
Intersection #6: Bayshore Blvd and Old County Rd



Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	84	882	28	141	864	53	73	107	95	35	147	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	882	28	141	864	53	73	107	95	35	147	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	882	28	141	864	53	73	107	95	35	147	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	882	28	141	864	53	73	107	95	35	147	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	882	28	141	864	53	73	107	95	35	147	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	84	882	28	141	864	53	73	107	95	35	147	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.19	0.81	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	346	1454	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.02	0.08	0.23	0.03	0.04	0.06	0.05	0.10	0.10	0.05
Crit Moves:		****		****				****		****		
Green Time:	11.7	29.7	42.7	10.3	28.4	38.4	10.0	10.0	10.0	13.0	13.0	13.0
Volume/Cap:	0.31	0.59	0.03	0.59	0.60	0.06	0.31	0.42	0.41	0.59	0.59	0.31
Delay/Veh:	28.7	18.4	7.1	34.0	19.5	9.2	29.7	30.5	30.9	31.4	31.4	27.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.7	18.4	7.1	34.0	19.5	9.2	29.7	30.5	30.9	31.4	31.4	27.7
DesignQueue:	3	24	1	5	24	1	3	4	3	1	5	3

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

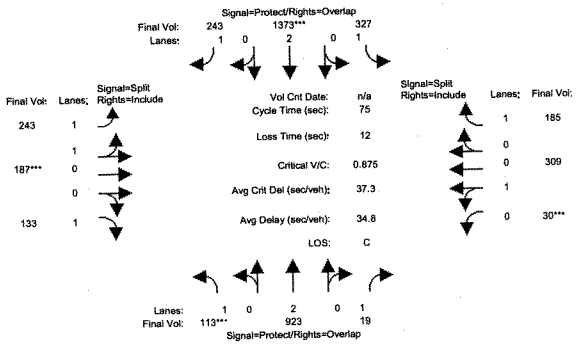
Intersection #6: Bayshore Blvd and Old County Rd



Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	84	882	28	153	864	53	73	108	95	35	153	158
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	882	28	153	864	53	73	108	95	35	153	158
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	882	28	153	864	53	73	108	95	35	153	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	882	28	153	864	53	73	108	95	35	153	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	882	28	153	864	53	73	108	95	35	153	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	84	882	28	153	864	53	73	108	95	35	153	158
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.19	0.81	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	335	1465	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.02	0.09	0.23	0.03	0.04	0.06	0.05	0.10	0.10	0.09
Crit Moves:		****		****				****		****		
Green Time:	11.6	29.0	42.1	10.9	28.3	38.3	10.0	10.0	10.0	13.1	13.1	13.1
Volume/Cap:	0.31	0.60	0.03	0.60	0.60	0.06	0.31	0.43	0.41	0.60	0.60	0.52
Delay/Veh:	28.8	19.1	7.4	33.9	19.5	9.3	29.7	30.6	30.9	31.8	31.8	29.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.8	19.1	7.4	33.9	19.5	9.3	29.7	30.6	30.9	31.8	31.8	29.7
DesignQueue:	3	24	1	6	24	1	3	4	3	1	5	6

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/o proj

Intersection #6: Bayshore Blvd and Old County Rd

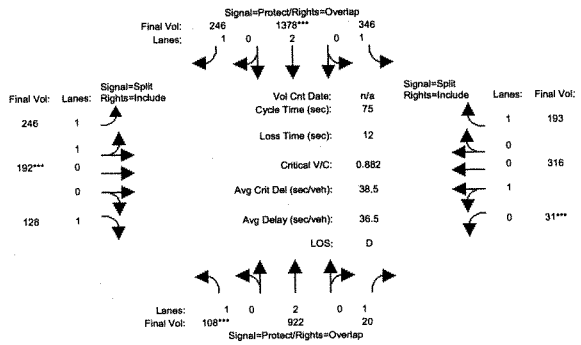


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	113	923	19	327	1373	243	243	187	133	30	309	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	923	19	327	1373	243	243	187	133	30	309	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	923	19	327	1373	243	243	187	133	30	309	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	113	923	19	327	1373	243	243	187	133	30	309	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	923	19	327	1373	243	243	187	133	30	309	185
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	113	923	19	327	1373	243	243	187	133	30	309	185
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.14	0.86	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	2006	1544	1750	159	1641	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.01	0.19	0.36	0.14	0.12	0.12	0.08	0.19	0.19	0.11
Crit Moves:	****				****			****		****		
Green Time:	7.0	21.0	36.7	16.2	30.2	40.3	10.1	10.1	10.1	15.7	15.7	15.7
Volume/Cap:	0.69	0.87	0.02	0.87	0.90	0.26	0.90	0.90	0.56	0.90	0.90	0.50
Delay/Veh:	45.0	33.4	9.9	47.1	28.5	9.5	51.5	51.5	33.5	52.2	52.2	27.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.0	33.4	9.9	47.1	28.5	9.5	51.5	51.5	33.5	52.2	52.2	27.3
DesignQueue:	4	30	0	11	38	5	9	7	5	1	11	6

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cum PM w/proj

Intersection #6: Bayshore Blvd and Old County Rd

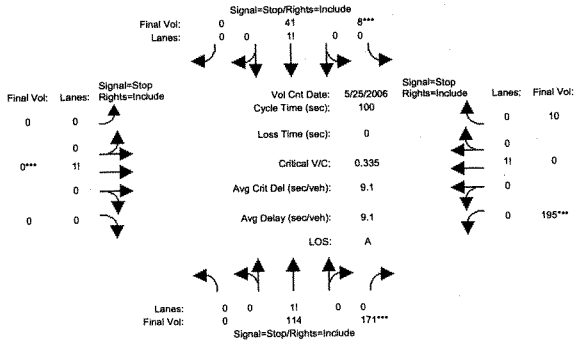


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	108	922	20	346	1378	246	246	192	128	31	316	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	922	20	346	1378	246	246	192	128	31	316	193
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	922	20	346	1378	246	246	192	128	31	316	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	922	20	346	1378	246	246	192	128	31	316	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	922	20	346	1378	246	246	192	128	31	316	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	108	922	20	346	1378	246	246	192	128	31	316	193
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.14	0.86	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1994	1556	1750	161	1639	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.01	0.20	0.36	0.14	0.12	0.12	0.07	0.19	0.19	0.11
Crit Moves:	****				****			****		****		
Green Time:	7.0	20.3	36.2	16.6	29.9	40.1	10.2	10.2	10.2	15.9	15.9	15.9
Volume/Cap:	0.66	0.89	0.02	0.89	0.91	0.26	0.91	0.91	0.54	0.91	0.91	0.52
Delay/Veh:	42.5	36.5	10.1	50.7	29.7	9.6	53.0	53.0	32.7	53.9	53.9	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.5	36.5	10.1	50.7	29.7	9.6	53.0	53.0	32.7	53.9	53.9	27.5
DesignQueue:	4	30	0	12	38	5	9	7	5	1	11	7

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

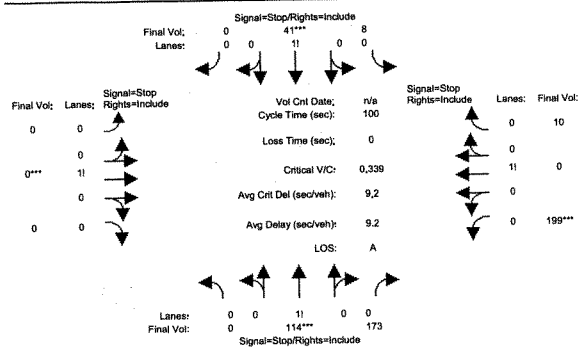
Intersection #7: Tunnel Ave and Lagoon Wy



Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 25 May 2006 <<												
Base Vol:	0	114	171	8	41	0	0	0	0	195	0	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	114	171	8	41	0	0	0	0	195	0	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	114	171	8	41	0	0	0	0	195	0	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	114	171	8	41	0	0	0	0	195	0	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	114	171	8	41	0	0	0	0	195	0	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	114	171	8	41	0	0	0	0	195	0	10
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.40	0.60	0.16	0.84	0.00	0.00	1.00	0.00	0.95	0.00	0.05
Final Sat.:	0	340	510	118	607	0	0	685	0	686	0	35
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.34	0.34	0.07	0.07	xxxx	xxxx	0.00	xxxx	0.28	xxxx	0.28
Crit Moves:			****	****				****		****		
Delay/Veh:	0.0	9.1	9.1	8.0	8.0	0.0	0.0	0.0	0.0	9.5	0.0	9.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.1	9.1	8.0	8.0	0.0	0.0	0.0	0.0	9.5	0.0	9.5
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		9.1			8.0			xxxxxx			9.5	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.1			8.0			xxxxxx			9.5	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Bkgrd PM

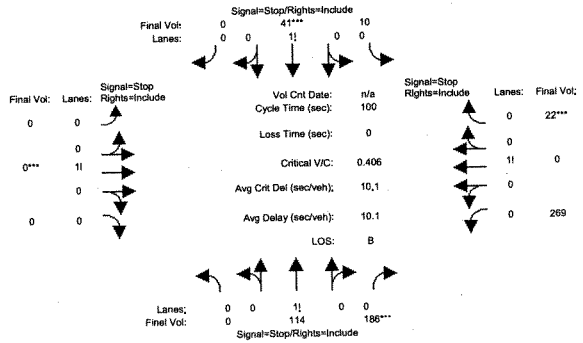
Intersection #7: Tunnel Ave and Lagoon Wy



Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	114	173	8	41	0	0	0	0	199	0	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	114	173	8	41	0	0	0	0	199	0	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	114	173	8	41	0	0	0	0	199	0	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	114	173	8	41	0	0	0	0	199	0	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	114	173	8	41	0	0	0	0	199	0	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	114	173	8	41	0	0	0	0	199	0	10
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.40	0.60	0.16	0.84	0.00	0.00	1.00	0.00	0.95	0.00	0.05
Final Sat.:	0	336	510	118	604	0	0	683	0	686	0	34
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.34	0.34	0.07	0.07	xxxx	xxxx	0.00	xxxx	0.29	xxxx	0.29
Crit Moves:		****			****			****		****		
Delay/Veh:	0.0	9.1	9.1	8.1	8.1	0.0	0.0	0.0	0.0	9.6	0.0	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.1	9.1	8.1	8.1	0.0	0.0	0.0	0.0	9.6	0.0	9.6
LOS by Move:	*	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:		9.1			8.1			xxxxxx			9.6	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.1			8.1			xxxxxx			9.6	
LOS by Appr:		A			A			*			A	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #7: Tunnel Ave and Lagoon Wy

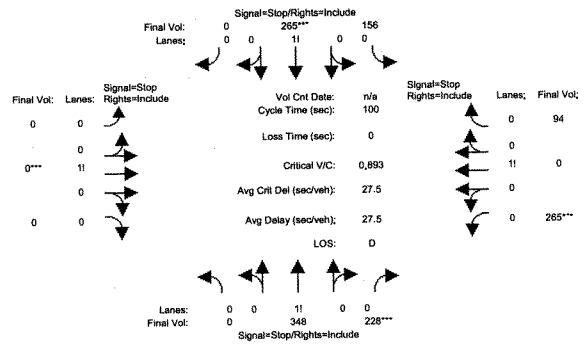


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	114	186	10	41	0	0	0	0	269	0	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	114	186	10	41	0	0	0	0	269	0	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	114	186	10	41	0	0	0	0	269	0	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	114	186	10	41	0	0	0	0	269	0	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	114	186	10	41	0	0	0	0	269	0	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	114	186	10	41	0	0	0	0	269	0	22
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.38	0.62	0.20	0.80	0.00	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	0	304	496	133	544	0	0	655	0	663	0	54
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.37	0.37	0.08	0.08	xxxx	xxxx	0.00	xxxx	0.41	xxxx	0.41
Crit Moves:			****		****			****				****
Delay/Veh:	0.0	9.7	9.7	8.4	8.4	0.0	0.0	0.0	0.0	10.8	0.0	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.7	9.7	8.4	8.4	0.0	0.0	0.0	0.0	10.8	0.0	10.8
LOS by Move:	*	A	A	A	A	*	*	*	*	B	*	B
ApproachDel:		9.7			8.4			xxxxxx			10.8	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		9.7			8.4			xxxxxx			10.8	
LOS by Appr:		A			A			*			B	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM w/o proj

Intersection #7: Tunnel Ave and Lagoon Wy

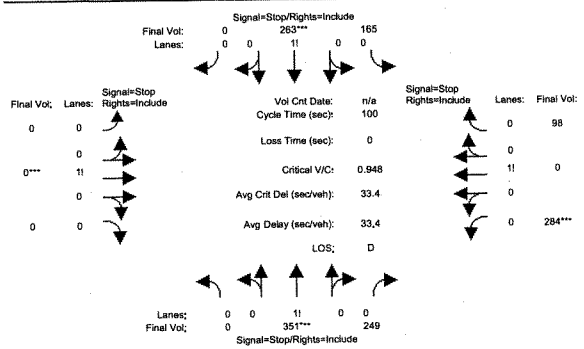


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	348	228	156	265	0	0	0	0	265	0	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	348	228	156	265	0	0	0	0	265	0	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	348	228	156	265	0	0	0	0	265	0	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	348	228	156	265	0	0	0	0	265	0	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	348	228	156	265	0	0	0	0	265	0	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	348	228	156	265	0	0	0	0	265	0	94
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.60	0.40	0.37	0.63	0.00	0.00	1.00	0.00	0.74	0.00	0.26
Final Sat.:	0	390	255	216	367	0	0	404	0	401	0	142
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.89	0.89	0.72	0.72	xxxx	xxxx	0.00	xxxx	0.66	xxxx	0.66
Crit Moves:			****		****			****		****		
Delay/Veh:	0.0	36.2	36.2	22.1	22.1	0.0	0.0	0.0	0.0	19.7	0.0	19.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	36.2	36.2	22.1	22.1	0.0	0.0	0.0	0.0	19.7	0.0	19.7
LOS by Move:	*	E	E	C	C	*	*	*	*	C	*	C
ApproachDel:		36.2			22.1			xxxxxx			19.7	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		36.2			22.1			xxxxxx			19.7	
LOS by Appr:		E			C			*			C	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM w/proj

Intersection #7: Tunnel Ave and Lagoon Wy

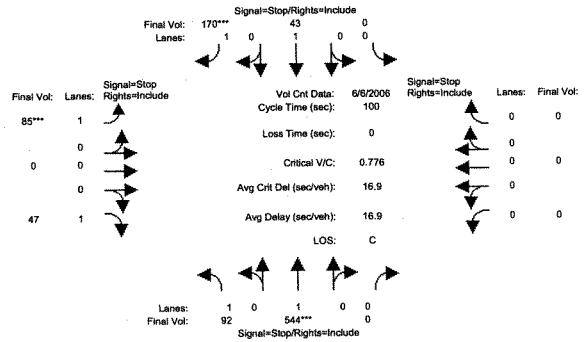


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	351	249	165	263	0	0	0	0	284	0	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	351	249	165	263	0	0	0	0	284	0	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	351	249	165	263	0	0	0	0	284	0	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	351	249	165	263	0	0	0	0	284	0	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	351	249	165	263	0	0	0	0	284	0	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	351	249	165	263	0	0	0	0	284	0	98
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.58	0.42	0.39	0.61	0.00	0.00	1.00	0.00	0.74	0.00	0.26
Final Sat.:	0	370	263	219	349	0	0	398	0	402	0	139
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.95	0.95	0.75	0.75	xxxx	xxxx	0.00	xxxx	0.71	xxxx	0.71
Crit Moves:		****			****			****		****		
Delay/Veh:	0.0	46.6	46.6	24.5	24.5	0.0	0.0	0.0	0.0	22.5	0.0	22.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	46.6	46.6	24.5	24.5	0.0	0.0	0.0	0.0	22.5	0.0	22.5
LOS by Move:	*	E	E	C	C	*	*	*	*	C	*	C
ApproachDel:		46.6			24.5			xxxxxx			22.5	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		46.6			24.5			xxxxxx			22.5	
LOS by Appr:		E			C			*			C	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

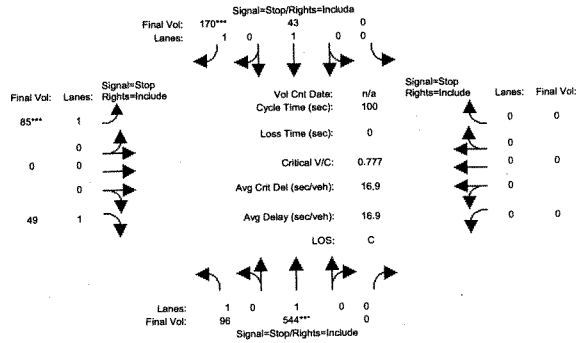


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 6 Jun 2006 <<												
Base Vol:	92	544	0	0	43	170	85	0	47	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	544	0	0	43	170	85	0	47	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	544	0	0	43	170	85	0	47	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	544	0	0	43	170	85	0	47	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	544	0	0	43	170	85	0	47	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	92	544	0	0	43	170	85	0	47	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	632	701	0	0	632	725	493	0	588	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.78	xxxx	xxxx	0.07	0.23	0.17	xxxx	0.08	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	9.2	22.9	0.0	0.0	8.6	8.9	10.9	0.0	8.8	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	22.9	0.0	0.0	8.6	8.9	10.9	0.0	8.8	0.0	0.0	0.0
LOS by Move:	A	C	*	*	A	A	B	*	A	*	*	*
ApproachDel:		20.9			8.9			10.1			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		20.9			8.9			10.1			xxxxxx	
LOS by Appr:		C			A			B			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Bkgrd PM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

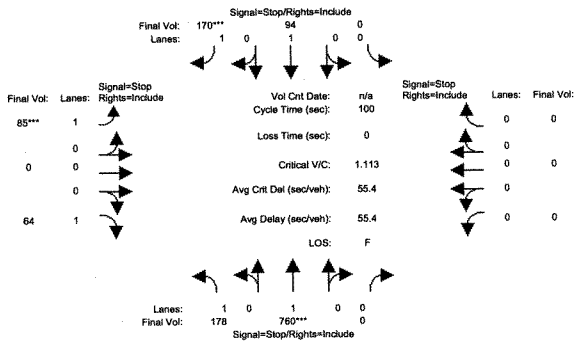


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	96	544	0	0	43	170	85	0	49	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	96	544	0	0	43	170	85	0	49	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	544	0	0	43	170	85	0	49	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	544	0	0	43	170	85	0	49	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	544	0	0	43	170	85	0	49	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	544	0	0	43	170	85	0	49	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	632	700	0	0	631	723	493	0	588	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.78	xxxx	xxxx	0.07	0.24	0.17	xxxx	0.08	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	9.3	23.0	0.0	0.0	8.6	9.0	10.9	0.0	8.8	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.3	23.0	0.0	0.0	8.6	9.0	10.9	0.0	8.8	0.0	0.0	0.0
LOS by Move:	A	C	*	*	A	A	B	*	A	*	*	*
ApproachDel:		20.9			8.9			10.1			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		20.9			8.9			10.1			xxxxxx	
LOS by Appr:		C			A			B			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

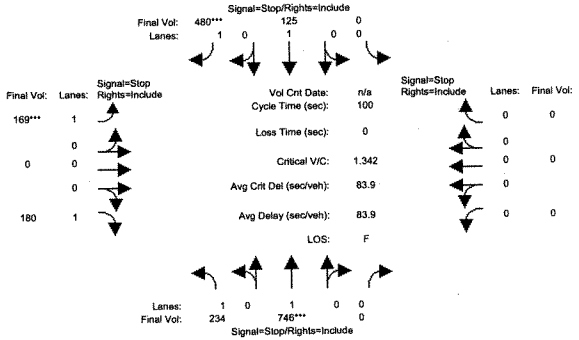


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	178	760	0	0	94	170	85	0	64	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	178	760	0	0	94	170	85	0	64	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	760	0	0	94	170	85	0	64	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	760	0	0	94	170	85	0	64	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	760	0	0	94	170	85	0	64	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	178	760	0	0	94	170	85	0	64	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	616	683	0	0	601	680	481	0	570	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.29	1.11	xxxx	xxxx	0.16	0.25	0.18	xxxx	0.11	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	10.8	90.5	0.0	0.0	9.7	9.6	11.6	0.0	9.6	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.8	90.5	0.0	0.0	9.7	9.6	11.6	0.0	9.6	0.0	0.0	0.0
LOS by Move:	B	F	*	*	A	A	B	*	A	*	*	*
ApproachDel:		75.4			9.6			10.7			xxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		75.4			9.6			10.7			xxxxx	
LOS by Appr:		F			A			B			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM w/o proj

Intersection #8: Sierra Point Pkwy and Lagoon Wy

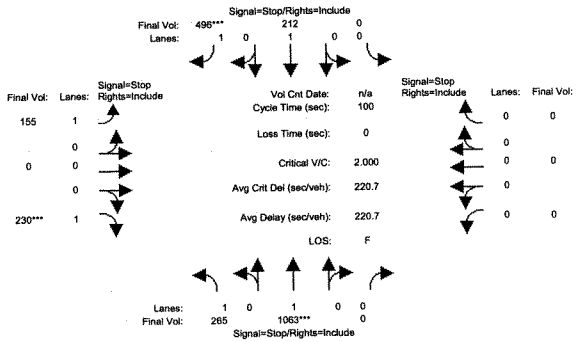


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	234	746	0	0	125	480	169	0	180	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	234	746	0	0	125	480	169	0	180	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	234	746	0	0	125	480	169	0	180	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	234	746	0	0	125	480	169	0	180	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	746	0	0	125	480	169	0	180	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	234	746	0	0	125	480	169	0	180	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	508	556	0	0	522	589	445	0	521	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.46	1.34	xxxx	xxxx	0.24	0.82	0.38	xxxx	0.35	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	15.3	185	0.0	0.0	11.6	29.7	15.2	0.0	12.8	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.3	185	0.0	0.0	11.6	29.7	15.2	0.0	12.8	0.0	0.0	0.0
LOS by Move:	C	F	*	*	B	D	C	*	B	*	*	*
ApproachDel:		144.6			25.9			14.0			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		144.6			25.9			14.0			xxxxxx	
LOS by Appr:		F			D			B			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM w/proj

Intersection #8: Sierra Point Pkwy and Lagoon Wy

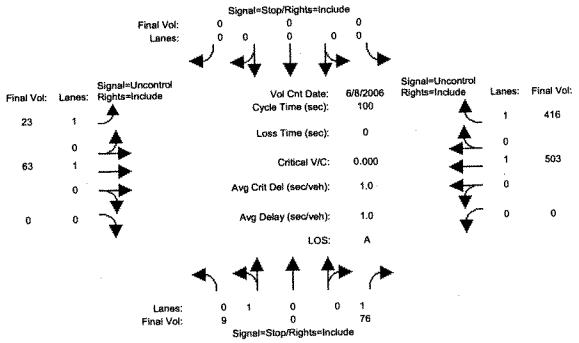


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	265	1063	0	0	212	496	155	0	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	265	1063	0	0	212	496	155	0	230	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	265	1063	0	0	212	496	155	0	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	265	1063	0	0	212	496	155	0	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	265	1063	0	0	212	496	155	0	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	265	1063	0	0	212	496	155	0	230	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	488	531	0	0	510	572	433	0	505	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.54	2.00	xxxx	xxxx	0.42	0.87	0.36	xxxx	0.46	xxxx	xxxx	xxxx
Crit Moves:		****				****			****			
Delay/Veh:	18.0	473	0.0	0.0	14.4	36.4	15.1	0.0	15.1	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.0	473	0.0	0.0	14.4	36.4	15.1	0.0	15.1	0.0	0.0	0.0
LOS by Move:	C	F	*	*	B	E	C	*	C	*	*	*
ApproachDel:		382.1			29.8			15.1			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		382.1			29.8			15.1			xxxxxx	
LOS by Appr:		F			D			C			*	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 8 Jun 2006 <<												
Base Vol:	9	0	76	0	0	0	23	63	0	0	503	416
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	76	0	0	0	23	63	0	0	503	416
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	0	76	0	0	0	23	63	0	0	503	416
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	0	76	0	0	0	23	63	0	0	503	416
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	9	0	76	0	0	0	23	63	0	0	503	416
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	820	xxxx	63	xxxx	xxxx	xxxxx	919	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	347	xxxx	1007	xxxx	xxxx	xxxxx	751	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	339	xxxx	1007	xxxx	xxxx	xxxxx	751	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	0.08	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	8.9	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	339	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	15.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	C	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.6			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		A			*			*			*	

Peak Hour Delay Signal Warrant Report

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

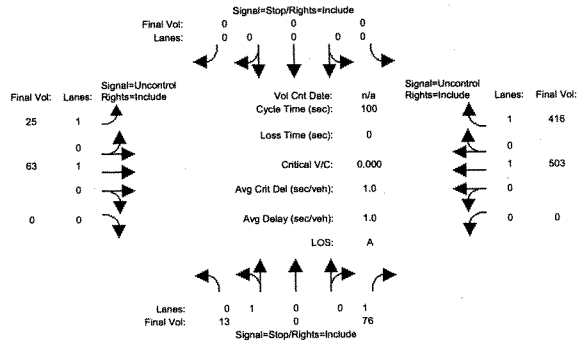
Approach:	North Bound	South Bound	East Bound	West Bound

```
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  1  0  0  1    0  0  0  0  0    1  0  1  0  0    0  0  1  0  1
Final Vol.:     9     0    76     0     0     0    23    63     0     0   503   416
ApproachDel:          9.6            xxxxxx          xxxxxx          xxxxxx
-------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=85]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1090]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #9 Sierra Point Pkwy and US 101 NB
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
-------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  1  0  0  1    0  0  0  0  0    1  0  1  0  0    0  0  1  0  1
Final Vol.:     9     0    76     0     0     0    23    63     0     0   503   416
-------------|---------------||---------------||---------------||---------------|
Major Street Volume:              1005
Minor Approach Volume:            85
Minor Approach Volume Threshold: 372
```


Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Bkgrd PM

Intersection #9: Sierra Point Pkwy and US 101 NB



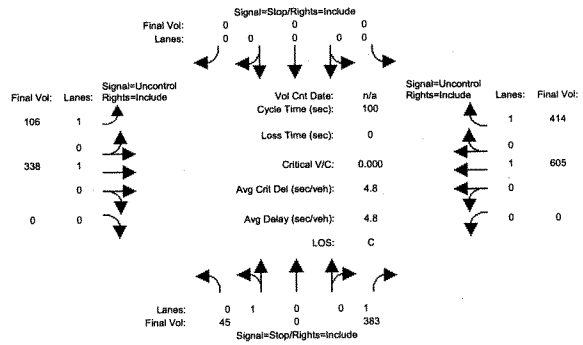

```
Street Name:          US 101 NB ramps                Sierra Point Parkway
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        13    0    76     0    0    0    25   63    0     0   503   416
Growth Adj:    1.00 1.00  1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
Initial Bse:     13    0    76     0    0    0    25   63    0     0   503   416
Added Vol:        0    0     0     0    0    0     0    0    0     0     0     0
PasserByVol:      0    0     0     0    0    0     0    0    0     0     0     0
Initial Fut:     13    0    76     0    0    0    25   63    0     0   503   416
User Adj:      1.00 1.00  1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
PHF Adj:       1.00 1.00  1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00  1.00
PHF Volume:      13    0    76     0    0    0    25   63    0     0   503   416
Reduct Vol:       0    0     0     0    0    0     0    0    0     0     0     0
Final Vol.:      13    0    76     0    0    0    25   63    0     0   503   416
Critical Gap Module:
Critical Gp:   6.4 xxxx   6.2 xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:   3.5 xxxx   3.3 xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  824 xxxx     63  xxxx xxxx xxxxx   919 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  346 xxxx   1007  xxxx xxxx xxxxx   751 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    337 xxxx   1007  xxxx xxxx xxxxx   751 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.04 xxxx   0.08  xxxx xxxx  xxxx  0.03 xxxx  xxxx  xxxx xxxx  xxxx
-------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:       xxxxx xxxx   0.2 xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx   8.9 xxxxx xxxx xxxxx  10.0 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *    *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.:  337 xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx   xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel: 16.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     C    *     *     *    *    *     *    *     *     *    *     *
ApproachDel:          9.9            xxxxxx          xxxxxx          xxxxxx
ApproachLOS:            A              *               *               *
                Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #9 Sierra Point Pkwy and US 101 NB
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
-------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
```

```
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
-----------|--------------||--------------||--------------||--------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  1  0  0  1     0  0  0  0  0     1  0  1  0  0     0  0  1  0  1
Final Vol.:     13     0     76      0     0      0    25    63      0      0   503   416
ApproachDel:          9.9             xxxxxx           xxxxxx           xxxxxx
-----------|--------------||--------------||--------------||--------------|
Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=89]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1096]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #9 Sierra Point Pkwy and US 101 NB
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
-----------|--------------||--------------||--------------||--------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
-----------|--------------||--------------||--------------||--------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  1  0  0  1     0  0  0  0  0     1  0  1  0  0     0  0  1  0  1
Final Vol.:     13     0     76      0     0      0    25    63      0      0   503   416
-----------|--------------||--------------||--------------||--------------|
Major Street Volume:                1007
Minor Approach Volume:              89
Minor Approach Volume Threshold:    371
```


Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum PM w/proj

Intersection #9: Sierra Point Pkwy and US 101 NB



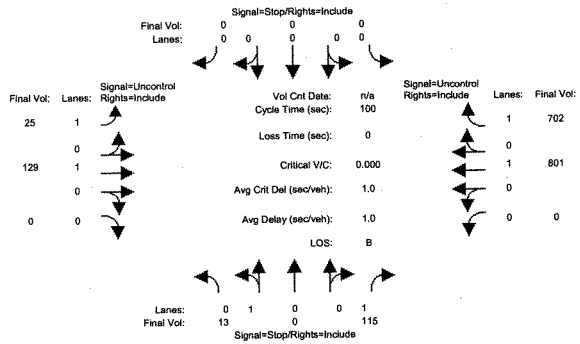

```
Street Name:          US 101 NB ramps                Sierra Point Parkway
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
-----------|--------------||--------------||--------------||--------------|
Volume Module:
Base Vol:        45     0   383      0     0     0   106   338     0      0   605   414
Growth Adj:    1.00  1.00  1.00   1.00  1.00  1.00  1.00  1.00  1.00   1.00  1.00  1.00
Initial Bse:     45     0   383      0     0     0   106   338     0      0   605   414
Added Vol:        0     0     0      0     0     0     0     0     0      0     0     0
PasserByVol:      0     0     0      0     0     0     0     0     0      0     0     0
Initial Fut:     45     0   383      0     0     0   106   338     0      0   605   414
User Adj:      1.00  1.00  1.00   1.00  1.00  1.00  1.00  1.00  1.00   1.00  1.00  1.00
PHF Adj:       1.00  1.00  1.00   1.00  1.00  1.00  1.00  1.00  1.00   1.00  1.00  1.00
PHF Volume:      45     0   383      0     0     0   106   338     0      0   605   414
Reduct Vol:       0     0     0      0     0     0     0     0     0      0     0     0
Final Vol.:      45     0   383      0     0     0   106   338     0      0   605   414
Critical Gap Module:
Critical Gp:   6.4  xxxx   6.2  xxxxx xxxx xxxxx   4.1  xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:   3.5  xxxx   3.3  xxxxx xxxx xxxxx   2.2  xxxx xxxxx xxxxx xxxx xxxxx
-----------|--------------||--------------||--------------||--------------|
Capacity Module:
Cnflict Vol: 1362 xxxx   338  xxxx xxxx xxxxx  1019 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  165 xxxx   709  xxxx xxxx xxxxx   689 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    145 xxxx   709  xxxx xxxx xxxxx   689 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.31 xxxx  0.54  xxxx xxxx  xxxx  0.15 xxxx  xxxx  xxxx xxxx  xxxx
-----------|--------------||--------------||--------------||--------------|
Level Of Service Module:
Queue:       xxxxx xxxx   3.3 xxxxx xxxx xxxxx   0.5 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx  15.9 xxxxx xxxx xxxxx  11.2 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *     *     C     *     *     *     B     *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.:  145 xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  1.2 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel: 40.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     E     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:         18.5           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:            C                *                *                *
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #9 Sierra Point Pkwy and US 101 NB
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
-----------|--------------||--------------||--------------||--------------|
Approach:       North Bound      South Bound      East Bound       West Bound
```

```
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-----------|--------------||--------------||--------------||--------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  1  0  0  1    0  0  0  0  0    1  0  1  0  0    0  0  1  0  1
Final Vol.:     45     0   383      0     0      0   106  338      0      0  605   414
ApproachDel:         18.5            xxxxxx           xxxxxx           xxxxxx
-----------|--------------||--------------||--------------||--------------|
Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=2.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=428]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1891]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #9 Sierra Point Pkwy and US 101 NB
********************************************************************************
Future Volume Alternative: Peak Hour Warrant Met
-----------|--------------||--------------||--------------||--------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-----------|--------------||--------------||--------------||--------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  1  0  0  1    0  0  0  0  0    1  0  1  0  0    0  0  1  0  1
Final Vol.:     45     0   383      0     0      0   106  338      0      0  605   414
-----------|--------------||--------------||--------------||--------------|
Major Street Volume:              1463
Minor Approach Volume:            428
Minor Approach Volume Threshold: 210
```


Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #9: Sierra Point Pkwy and US 101 NB




```
Street Name:         US 101 NB ramps                Sierra Point Parkway
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|--------------||--------------||--------------||--------------|
Volume Module:
Base Vol:        13     0   115      0     0      0    25   129      0      0  801   702
Growth Adj:    1.00  1.00  1.00   1.00  1.00   1.00  1.00  1.00  1.00   1.00  1.00  1.00
Initial Bse:     13     0   115      0     0      0    25   129      0      0  801   702
Added Vol:        0     0     0      0     0      0     0     0      0      0    0     0
PasserByVol:      0     0     0      0     0      0     0     0      0      0    0     0
Initial Fut:     13     0   115      0     0      0    25   129      0      0  801   702
User Adj:      1.00  1.00  1.00   1.00  1.00   1.00  1.00  1.00  1.00   1.00  1.00  1.00
PHF Adj:       1.00  1.00  1.00   1.00  1.00   1.00  1.00  1.00  1.00   1.00  1.00  1.00
PHF Volume:      13     0   115      0     0      0    25   129      0      0  801   702
Reduct Vol:       0     0     0      0     0      0     0     0      0      0    0     0
Final Vol.:      13     0   115      0     0      0    25   129      0      0  801   702
Critical Gap Module:
Critical Gp:   6.4 xxxx   6.2 xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:   3.5 xxxx   3.3 xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|--------------||--------------||--------------||--------------|
Capacity Module:
Cnflict Vol: 1331 xxxx   129  xxxx xxxx xxxxx  1503 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  172 xxxx   926  xxxx xxxx xxxxx   452 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    165 xxxx   926  xxxx xxxx xxxxx   452 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.08 xxxx  0.12  xxxx xxxx  xxxx  0.06 xxxx  xxxx  xxxx xxxx  xxxx
------------|--------------||--------------||--------------||--------------|
Level Of Service Module:
Queue:       xxxxx xxxx   0.4 xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx   9.4 xxxxx xxxx xxxxx  13.4 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     *     *     A      *     *     *     B     *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.:  165 xxxx xxxxx   xxxx xxxx xxxxx   xxxx xxxx xxxxx   xxxx xxxx xxxxx
SharedQueue:  0.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel: 28.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     D     *     *      *     *     *     *     *     *     *     *     *
ApproachDel:         11.4            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:            B                 *                *                *
                  Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #9 Sierra Point Pkwy and US 101 NB
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|--------------||--------------||--------------||--------------|
Approach:       North Bound      South Bound      East Bound       West Bound
```

Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 0 1	0 0 0 0 0	1 0 1 0 0	0 0 1 0 1
Final Vol.:	13 0 115	0 0 0	25 129 0	0 801 702
ApproachDel:	11.4	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.4]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=128]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1785]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

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Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

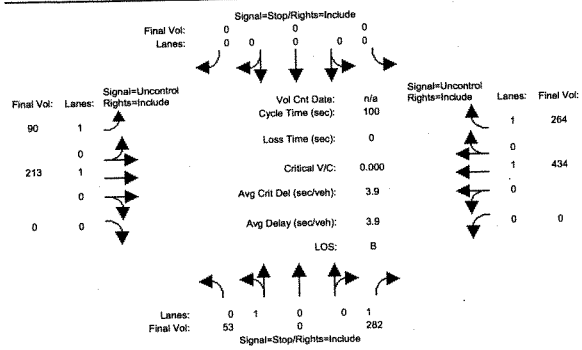
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 0 1	0 0 0 0 0	1 0 1 0 0	0 0 1 0 1
Final Vol.:	13 0 115	0 0 0	25 129 0	0 801 702

Major Street Volume: 1657
Minor Approach Volume: 128
Minor Approach Volume Threshold: 157

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cum PM w/o proj

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Volume Module:												
Base Vol:	53	0	282	0	0	0	90	213	0	0	434	264
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	0	282	0	0	0	90	213	0	0	434	264
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	0	282	0	0	0	90	213	0	0	434	264
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	0	282	0	0	0	90	213	0	0	434	264
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	53	0	282	0	0	0	90	213	0	0	434	264
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	959	xxxx	213	xxxx	xxxx	xxxxx	698	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	288	xxxx	832	xxxx	xxxx	xxxxx	908	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	266	xxxx	832	xxxx	xxxx	xxxxx	908	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.20	xxxx	0.34	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	1.5	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	11.5	xxxxx	xxxx	xxxxx	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	266	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	21.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	C	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	13.2			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 0 1	0 0 0 0 0	1 0 1 0 0	0 0 1 0 1
Final Vol.:	53 0 282	0 0 0	90 213 0	0 434 264
ApproachDel:	13.2	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=1.2]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=335]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1336]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

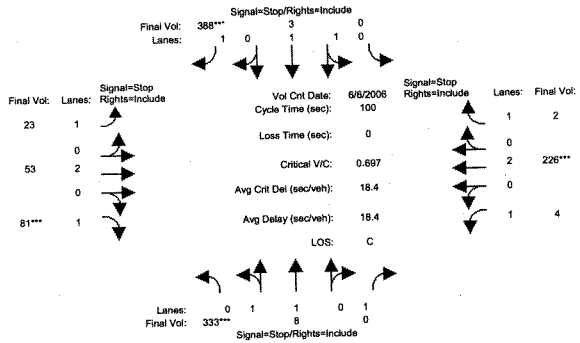
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 0 1	0 0 0 0 0	1 0 1 0 0	0 0 1 0 1
Final Vol.:	53 0 282	0 0 0	90 213 0	0 434 264

Major Street Volume: 1001
Minor Approach Volume: 335
Minor Approach Volume Threshold: 374

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

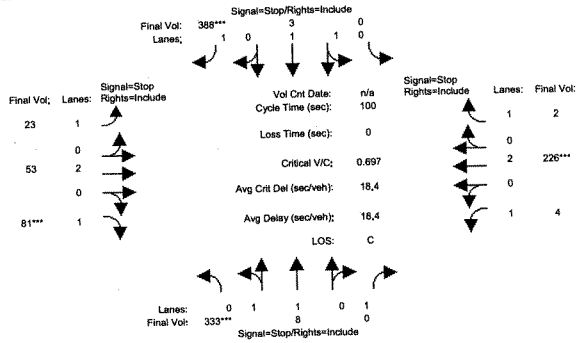
Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 6 Jun 2006 <<												
Base Vol:	333	8	0	0	3	388	23	53	81	4	226	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	333	8	0	0	3	388	23	53	81	4	226	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	333	8	0	0	3	388	23	53	81	4	226	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	333	8	0	0	3	388	23	53	81	4	226	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	333	8	0	0	3	388	23	53	81	4	226	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	333	8	0	0	3	388	23	53	81	4	226	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	478	498	550	0	995	566	407	864	475	423	909	492
Capacity Analysis Module:												
Vol/Sat:	0.70	0.02	0.00	xxxx	0.00	0.68	0.06	0.06	0.17	0.01	0.25	0.00
Crit Moves:	****					****			****		****	
Delay/Veh:	24.2	9.6	0.0	0.0	9.6	20.3	11.2	10.7	10.8	10.6	12.3	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.2	9.6	0.0	0.0	9.6	20.3	11.2	10.7	10.8	10.6	12.3	9.4
LOS by Move:	C	A	*	*	A	C	B	B	B	B	B	A
ApproachDel:		23.9			20.2			10.9			12.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.9			20.2			10.9			12.2	
LOS by Appr:		C			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Bkgrd PM

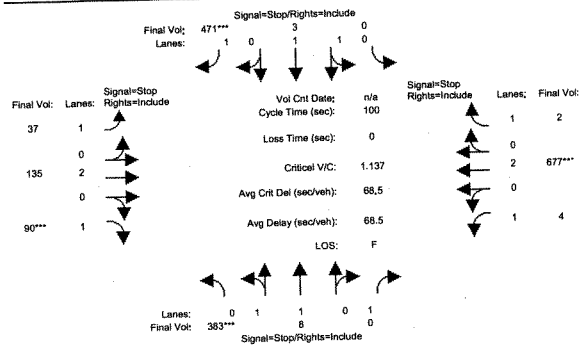
Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	333	8	0	0	3	388	23	53	81	4	226	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	333	8	0	0	3	388	23	53	81	4	226	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	333	8	0	0	3	388	23	53	81	4	226	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	333	8	0	0	3	388	23	53	81	4	226	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	333	8	0	0	3	388	23	53	81	4	226	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	333	8	0	0	3	388	23	53	81	4	226	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	478	498	550	0	995	566	407	864	475	423	909	492
Capacity Analysis Module:												
Vol/Sat:	0.70	0.02	0.00	xxxx	0.00	0.68	0.06	0.06	0.17	0.01	0.25	0.00
Crit Moves:	****					****			****		****	
Delay/Veh:	24.2	9.6	0.0	0.0	9.6	20.3	11.2	10.7	10.8	10.6	12.3	9.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.2	9.6	0.0	0.0	9.6	20.3	11.2	10.7	10.8	10.6	12.3	9.4
LOS by Move:	C	A	*	*	A	C	B	B	B	B	B	A
ApproachDel:		23.9			20.2			10.9			12.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.9			20.2			10.9			12.2	
LOS by Appr:		C			C			B			B	

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #10: Sierra Point Pkwy and Shoreline Ct

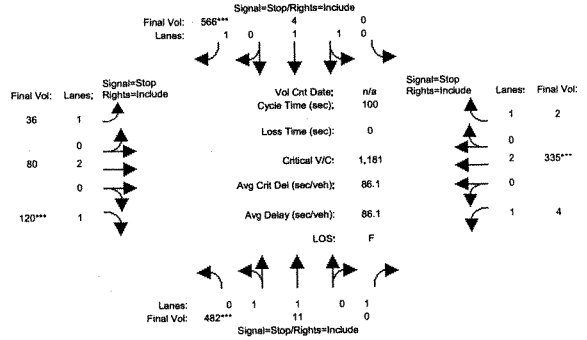


Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	383	8	0	0	3	471	37	135	90	4	677	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	383	8	0	0	3	471	37	135	90	4	677	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	383	8	0	0	3	471	37	135	90	4	677	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	383	8	0	0	3	471	37	135	90	4	677	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	383	8	0	0	3	471	37	135	90	4	677	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	383	8	0	0	3	471	37	135	90	4	677	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	364	376	405	0	750	414	330	693	372	380	806	435
Capacity Analysis Module:												
Vol/Sat:	1.05	0.02	0.00	xxxx	0.00	1.14	0.11	0.19	0.24	0.01	0.84	0.00
Crit Moves:	****					****			****		****	
Delay/Veh:	93.5	12.3	0.0	0.0	12.1	115.8	14.7	15.2	15.1	12.2	43.6	10.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.5	12.3	0.0	0.0	12.1	115.8	14.7	15.2	15.1	12.2	43.6	10.9
LOS by Move:	F	B	*	*	B	F	B	C	C	B	E	B
ApproachDel:		91.8			115.1			15.1			43.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		91.8			115.1			15.1			43.3	
LOS by Appr:		F			F			C			E	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM w/o proj

Intersection #10: Sierra Point Pkwy and Shoreline Ct

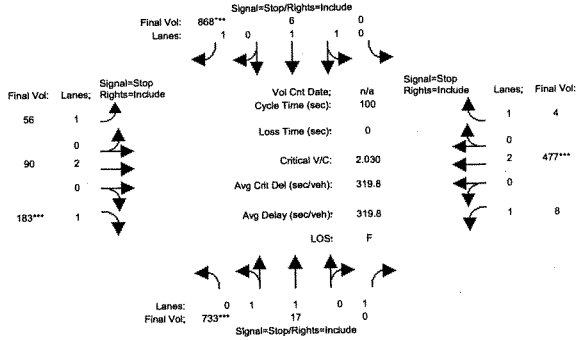


Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	482	11	0	0	4	566	36	80	120	4	335	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	482	11	0	0	4	566	36	80	120	4	335	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	482	11	0	0	4	566	36	80	120	4	335	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	482	11	0	0	4	566	36	80	120	4	335	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	482	11	0	0	4	566	36	80	120	4	335	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	482	11	0	0	4	566	36	80	120	4	335	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	414	429	468	0	856	479	370	779	423	386	818	443
Capacity Analysis Module:												
Vol/Sat:	1.16	0.03	0.00	xxxx	0.00	1.18	0.10	0.10	0.28	0.01	0.41	0.00
Crit Moves:	****					****			****		****	
Delay/Veh:	125.5	11.1	0.0	0.0	11.0	126.2	13.3	12.8	14.3	12.0	17.2	10.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	125.5	11.1	0.0	0.0	11.0	126.2	13.3	12.8	14.3	12.0	17.2	10.8
LOS by Move:	F	B	*	*	B	F	B	B	B	B	C	B
ApproachDel:		123.0			125.3			13.6			17.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		123.0			125.3			13.6			17.1	
LOS by Appr:		F			F			B			C	

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cum PM w/proj

Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	733	17	0	0	6	868	56	90	183	8	477	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	733	17	0	0	6	868	56	90	183	8	477	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	733	17	0	0	6	868	56	90	183	8	477	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	733	17	0	0	6	868	56	90	183	8	477	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	733	17	0	0	6	868	56	90	183	8	477	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	733	17	0	0	6	868	56	90	183	8	477	4
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	375	385	417	0	768	428	350	734	397	370	786	422
Capacity Analysis Module:												
Vol/Sat:	1.96	0.04	0.00	xxxx	0.01	2.03	0.16	0.12	0.46	0.02	0.61	0.01
Crit Moves:	****					****			****		****	
Delay/Veh:	460.4	12.2	0.0	0.0	11.9	490.6	14.7	13.6	18.8	12.5	24.7	11.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	460.4	12.2	0.0	0.0	11.9	490.6	14.7	13.6	18.8	12.5	24.7	11.2
LOS by Move:	F	B	*	*	B	F	B	B	C	B	C	B
ApproachDel:		450.3			487.3			16.7			24.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		450.3			487.3			16.7			24.4	
LOS by Appr:		F			F			C			C	

Appendix C-4

Approved Trips Inventory

South San Francisco ATI - AM

1	1		
Intersection Name:	Bayshore Blvd/Sister & Oyster Point Blvd		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	3	4	3	1	0	0	0	2	0	0	0	1
Total ATI	3	4	3	1	0	0	0	2	0	0	0	1

5	5		
Intersection Name:	Bayshore Blvd & Geneva Ave		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	9	0	0	0	0	0	28	11	4	0	0
Total ATI	0	9	0	0	0	0	0	28	11	4	0	0

6	6		
Intersection Name:	Bayshore Blvd & Old County Rd		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	41	3	1	0	0	0	14	0	0	0	0
Total ATI	0	41	3	1	0	0	0	14	0	0	0	0

7	7		
Intersection Name:	Tunnel Ave	& Lagoon Wy	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	0	0	0	0	1	3	0	0	0	0	0
Total ATI	0	0	0	0	0	1	3	0	0	0	0	0

8	8		
Intersection Name:	Sierra Point Pkwy	& Lagoon Wy	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	0	0	0	0	0	0	0	1	3	0	0
Total ATI	0	0	0	0	0	0	0	0	1	3	0	0

9	9		
Intersection Name:	US 101 NB	& Sierra Point Pkwy	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	0	0	0	0	0	0	0	1	0	0	3
Total ATI	0	0	0	0	0	0	0	0	1	0	0	3

South San Francisco ATI - PM

1 1
Intersection Name: Bayshore Blvd/Sister & Oyster Point Blvd
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: Count Date #####
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	2	3	2	4	0	0	0	5	0	0	0	4
Total ATI	2	3	2	4	0	0	0	5	0	0	0	4

5 5
Intersection Name: Bayshore Blvd & Geneva Ave
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date #####
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	32	0	0	0	0	0	18	7	12	0	0
Total ATI	0	32	0	0	0	0	0	18	7	12	0	0

6 6
Intersection Name: Bayshore Blvd & Old County Rd
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date #####
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	27	2	4	0	0	0	47	0	0	0	0
Total ATI	0	27	2	4	0	0	0	47	0	0	0	0

7	7		
Intersection Name:	Tunnel Ave	& Lagoon Wy	
Peak Hour:	PM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	0	0	0	0	4	2	0	0	0	0	0
Total ATI	0	0	0	0	0	4	2	0	0	0	0	0

8	8		
Intersection Name:	Sierra Point Pkwy	& Lagoon Wy	
Peak Hour:	PM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	0	0	0	0	0	0	0	4	2	0	0
Total ATI	0	0	0	0	0	0	0	0	4	2	0	0

9	9		
Intersection Name:	US 101 NB	& Sierra Point Pkwy	
Peak Hour:	PM	Date of Analysis:	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
One Quarry Rd	0	0	0	0	0	0	0	0	4	0	0	2
Total ATI	0	0	0	0	0	0	0	0	4	0	0	2

South San Francisco ATI - AM

5	5		
Intersection Name:	Bayshore Blvd	& Geneva Ave	
Peak Hour:	AM	Date of Analysis	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Ye	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
2011 Bayshore	-	-	0	0	0	0	0	-	0	0	0	-
Executive Park	220	147	0	0	0	0	0	4	0	0	0	13
Total ATI	220	147	0	0	0	0	0	4	0	0	0	13

South San Francisco ATI - PM

5	5		
Intersection Name:	Bayshore Blvd	& Geneva Ave	
Peak Hour:	PM	Date of Analysis: 7/12/06	
Scenario:	0	Count Date #####	
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
2011 Bayshore	3	1	0	0	0	0	0	1	0	0	0	5
Executive Park	76	50	0	0	0	0	0	59	0	0	0	211
Total ATI	79	51	0	0	0	0	0	60	0	0	0	216

South San Francisco ATI - AM

1	1		
Intersection Name:	Bayshore Blvd/Sister & Oyster Point Blvd		
Peak Hour:	AM	Date of Analysis	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Ye	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
Home Depot	0	0	23	2	17	3	3	0	0	0	23	0
Lowes	0	0	16	3	18	2	3	0	0	0	25	0
249 East Grand	0	0	74	9	9	0	0	0	0	0	25	0
Genentech	0	0	0	0	9	0	0	0	0	0	72	0
Britannia East Grand	0	125	0	0	0	0	0	23	0	0	0	0
Terrabay	60	9	21	0	155	0	0	-14	14	0	-2	32
Total ATI	60	134	134	14	208	5	6	9	14	0	143	32

5	5		
Intersection Name:	Bayshore Blvd	& Geneva Ave	
Peak Hour:	AM	Date of Analysis	7/12/06
Scenario:	0	Count Date	#####
(SJ) Growth Factor:	0.003	Future Growth % Per Ye	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
Home Depot									1	6		
Lowes									2	6		
249 East Grand									7	19		
Genentech									0	0		
Britannia East Grand									17	94		
Terrabay									0	-16		
Total ATI	0	0	0	0	0	0	0	0	27	109	0	0

6	6		
Intersection Name:	Bayshore Blvd	& Old County Rd	
Peak Hour:	AM	Date of Analysis	7/12/06
Scenario:	0	Count Date	######
(SJ) Growth Factor:	0.003	Future Growth % Per Ye	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
Home Depot		8						2				
Lowes		8						3				
249 East Grand		25						9				
Genentech		0						0				
Britannia East Grand		125						23				
Terrabay		-22						0				
Total ATI	0	144	0	0	0	0	0	37	0	0	0	0

South San Francisco ATI - PM

1 1
Intersection Name: Bayshore Blvd/Sister & Oyster Point Blvd
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: Count Date #####
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
Home Depot	0	0	45	4	48	10	9	0	0	0	42	0
Lowes	0	0	37	3	56	8	6	0	0	0	25	0
249 East Grand	0	0	14	60	60	0	0	0	0	0	5	0
Genentech	0	0	0	0	60	0	0	0	0	0	12	0
Britannia East Grand	0	32	0	0	0	0	0	111	0	0	0	0
Terrabay	179	35	30	58	56	0	-22	37	12	0	-9	186
Total ATI	179	67	126	125	280	18	-7	148	12	0	75	186

5 5
Intersection Name: Bayshore Blvd & Geneva Ave
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date #####
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
Home Depot									3	13		
Lowes									2	16		
249 East Grand									45	4		
Genentech									0	0		
Britannia East Grand									83	24		
Terrabay									-33	22		
Total ATI	0	0	0	0	0	0	0	0	100	79	0	0

6	6		
Intersection Name:	Bayshore Blvd	& Old County Rd	
Peak Hour:	PM	Date of Analysis: 7/12/06	
Scenario:	0	Count Date #####	
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Approved Project Trips												
Home Depot		18						4				
Lowes		21						3				
249 East Grand		5						60				
Genentech		0						0				
Britannia East Grand		32						111				
Terrabay		30						-44				
Total ATI	0	106	0	0	0	0	0	134	0	0	0	0

Appendix C-5

Volume Summary Sheets

1 1
Intersection Name: Bayshore Blvd/Sister & Oyster Point Blvd
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: Count Date: 06/07/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	238	602	160	23	729	157	204	128	35	33	312	63
Approved Project Trips												
South San Francisco	179	67	126	125	280	18	-7	148	12	0	75	186
San Francisco												
Brisbane	2	3	2	4	0	0	0	5	0	0	0	4
Total ATI	181	70	128	129	280	18	-7	153	12	0	75	190
Background Volume	419	672	288	152	1009	175	197	281	47	33	387	253
	419	672	288	152	1009	175	197	281	47	33	387	253
Project Trips	23	12	0	0	0	0	0	2	0	0	0	4
Project Conditions	442	684	288	152	1009	175	197	283	47	33	387	257
	444	685	288	152	1009	175	197	284	47	33	387	259

2 2
Intersection Name: Congdon Street & Alemany Blvd
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 06/08/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	26	464	230	2	818	0	208	74	140	68	687	0
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	26	464	230	2	818	0	208	74	140	68	687	0
	26	464	230	2	818	0	208	74	140	68	687	0
Project Trips	0	0	1	0	12	0	0	0	0	0	3	0
Project Conditions	26	464	231	2	830	0	208	74	140	68	690	0
	26	464	231	2	831	0	208	74	140	68	691	0

3	3		
Intersection Name:	Alemany Blvd	& Geneva Ave	
Peak Hour:	PM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/07/06
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	48	516	106	68	634	145	227	375	85	86	558	254
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	48	516	106	68	634	145	227	375	85	86	558	254
	48	516	106	68	634	145	227	375	85	86	558	254
Project Trips	0	0	0	0	18	0	0	0	0	0	3	0
Project Conditions	48	516	106	68	652	145	227	375	85	86	561	254
	48	516	106	68	653	145	227	375	85	86	562	254

4	4		
Intersection Name:	Mission St	& Geneva Ave	
Peak Hour:	PM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/06/06
(SJ) Growth Factor:	0.003	Future Growth % Per Yea	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	154	324	116	296	792	4	140	418	39	105	794	6
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	154	324	116	296	792	4	140	418	39	105	794	6
	154	324	116	296	792	4	140	418	39	105	794	6
Project Trips	0	0	0	0	18	6	1	0	0	0	3	0
Project Conditions	154	324	116	296	810	10	141	418	39	105	797	6
	154	324	116	296	811	10	141	418	39	105	798	6

5 5
Intersection Name: Bayshore Blvd & Geneva Ave
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 05/25/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	363	288	47	0	0	0	0	341	442	241	0	289
Approved Project Trips												
South San Francisco	0	0	0	0	0	0	0	0	100	79	0	0
San Francisco	79	51	0	0	0	0	0	60	0	0	0	216
Brisbane	0	32	0	0	0	0	0	18	7	12	0	0
Total ATI	79	83	0	0	0	0	0	78	107	91	0	216
Background Volume	442	371	47	0	0	0	0	419	549	332	0	505
	442	371	47	0	0	0	0	419	549	332	0	505
Project Trips	0	0	0	0	0	0	0	0	47	8	0	0
Project Conditions	442	371	47	0	0	0	0	419	596	340	0	505
	442	371	47	0	0	0	0	419	599	344	0	505

6 6
Intersection Name: Bayshore Blvd & Old County Rd
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 05/25/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	53	731	139	90	147	35	28	701	84	95	107	73
Approved Project Trips												
South San Francisco	0	106	0	0	0	0	0	134	0	0	0	0
San Francisco												
Brisbane	0	27	2	4	0	0	0	47	0	0	0	0
Total ATI	0	133	2	4	0	0	0	181	0	0	0	0
Background Volume	53	864	141	94	147	35	28	882	84	95	107	73
	53	864	141	94	147	35	28	882	84	95	107	73
Project Trips	0	0	12	64	6	0	0	0	0	0	1	0
Project Conditions	53	864	153	158	153	35	28	882	84	95	108	73
	53	864	157	163	153	35	28	882	84	95	108	73

7 7
Intersection Name: Tunnel Ave & Lagoon Wy
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 05/25/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	0	41	8	10	0	195	171	114	0	0	0	0
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane	0	0	0	0	0	4	2	0	0	0	0	0
Total ATI	0	0	0	0	0	4	2	0	0	0	0	0
Background Volume	0	41	8	10	0	199	173	114	0	0	0	0
	0	41	8	10	0	199	173	114	0	0	0	0
Project Trips	0	0	2	12	0	70	13	0	0	0	0	0
Project Conditions	0	41	10	22	0	269	186	114	0	0	0	0
	0	41	11	23	0	274	191	114	0	0	0	0

8 8
Intersection Name: Sierra Point Pkwy & Lagoon Wy
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 06/06/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	170	43	0	0	0	0	0	544	92	47	0	85
	170	43	0	0	0	0	0	544	92	47	0	85
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane	0	0	0	0	0	0	0	0	4	2	0	0
Total ATI	0	0	0	0	0	0	0	0	4	2	0	0
Background Volume	170	43	0	0	0	0	0	544	96	49	0	85
	170	43	0	0	0	0	0	544	96	49	0	85
Project Trips	0	51	0	0	0	0	0	216	82	15	0	0
Project Conditions	170	94	0	0	0	0	0	760	178	64	0	85
	170	114	0	0	0	0	0	776	184	70	0	85

9 9
Intersection Name: US 101 NB & Sierra Point Pkwy
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 06/08/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	0	0	0	416	503	0	76	0	9	0	63	23
	0	0	0	416	503	0	76	0	9	0	63	23
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane	0	0	0	0	0	0	0	0	4	0	0	2
Total ATI	0	0	0	0	0	0	0	0	4	0	0	2
Background Volume	0	0	0	416	503	0	76	0	13	0	63	25
	0	0	0	416	503	0	76	0	13	0	63	25
Project Trips	0	0	0	286	298	0	39	0	0	0	66	0
Project Conditions	0	0	0	702	801	0	115	0	13	0	129	25
	0	0	0	724	823	0	130	0	13	0	155	25

10 10
Intersection Name: Sierra Point Pkwy & Shoreline Ct
Peak Hour: PM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 06/06/06
(SJ) Growth Factor: 0.003 Future Growth % Per Yea 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	388	3	0	2	226	4	0	8	333	81	53	23
	388	3	0	2	226	4	0	8	333	81	53	23
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	388	3	0	2	226	4	0	8	333	81	53	23
	388	3	0	2	226	4	0	8	333	81	53	23
Project Trips	83	0	0	0	451	0	0	0	50	9	82	14
Project Conditions	471	3	0	2	677	4	0	8	383	90	135	37
	471	3	0	2	716	4	0	8	388	94	172	37

1	1		
Intersection Name:	Bayshore Blvd/Sister & Oyster Point Blvd		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/07/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	91	418	496	343	141	61	287	402	22	46	1164	112
Approved Project Trips												
South San Francisco	60	134	134	14	208	5	6	9	14	0	143	32
San Francisco												
Brisbane	3	4	3	1	0	0	0	2	0	0	0	1
Total ATI	63	138	137	15	208	5	6	11	14	0	143	33
Background Volume	154	556	633	358	349	66	293	413	36	46	1307	145
	154	556	633	358	349	66	293	413	36	46	1307	145
Project Trips	5	3	0	0	0	0	0	13	0	0	0	26
Project Conditions	159	559	633	358	349	66	293	426	36	46	1307	171
	160	559	633	358	349	66	293	426	36	46	1307	172

2	2		
Intersection Name:	Congdon Street & Alemany Blvd		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/08/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	17	219	315	1	240	0	437	31	205	29	1350	0
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	17	219	315	1	240	0	437	31	205	29	1350	0
	17	219	315	1	240	0	437	31	205	29	1350	0
Project Trips	0	0	7	0	3	0	0	0	0	0	20	0
Project Conditions	17	219	322	1	243	0	437	31	205	29	1370	0
	17	219	322	1	243	0	437	31	205	29	1370	0

3	3		
Intersection Name:	Alemany Blvd	& Geneva Ave	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/07/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	42	452	104	52	604	177	176	692	102	172	681	321
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	42	452	104	52	604	177	176	692	102	172	681	321
	42	452	104	52	604	177	176	692	102	172	681	321
Project Trips	0	0	0	0	4	0	0	0	0	0	20	0
Project Conditions	42	452	104	52	608	177	176	692	102	172	701	321
	42	452	104	52	608	177	176	692	102	172	701	321

4	4		
Intersection Name:	Mission St	& Geneva Ave	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/06/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	108	450	125	72	871	3	84	146	14	64	768	6
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	108	450	125	72	871	3	84	146	14	64	768	6
	108	450	125	72	871	3	84	146	14	64	768	6
Project Trips	0	0	0	0	4	1	7	0	0	0	20	0
Project Conditions	108	450	125	72	875	4	91	146	14	64	788	6
	108	450	125	72	875	4	91	146	14	64	788	6

5 5
Intersection Name: Bayshore Blvd & Geneva Ave
Peak Hour: AM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 05/25/06
(SJ) Growth Factor: 0.003 Future Growth % Per Year: 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	225	376	48	0	0	0	0	239	239	417	0	458
Approved Project Trips												
South San Francisco	0	0	0	0	0	0	0	0	27	109	0	0
San Francisco	220	147	0	0	0	0	0	4	0	0	0	13
Brisbane	0	9	0	0	0	0	0	28	11	4	0	0
Total ATI	220	156	0	0	0	0	0	32	38	113	0	13
Background Volume	445	532	48	0	0	0	0	271	277	530	0	471
	445	532	48	0	0	0	0	271	277	530	0	471
Project Trips	0	0	0	0	0	0	0	0	11	52	0	0
Project Conditions	445	532	48	0	0	0	0	271	288	582	0	471
	445	532	48	0	0	0	0	271	288	583	0	471

6 6
Intersection Name: Bayshore Blvd & Old County Rd
Peak Hour: AM Date of Analysis: 7/12/06
Scenario: 0 Count Date: 05/25/06
(SJ) Growth Factor: 0.003 Future Growth % Per Year: 0.331
(SJ) Number of Months: 0.0 Number of Years to Buildout: 0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	54	725	133	94	87	35	47	716	101	79	147	60
Approved Project Trips												
South San Francisco	0	144	0	0	0	0	0	37	0	0	0	0
San Francisco												
Brisbane	0	41	3	1	0	0	0	14	0	0	0	0
Total ATI	0	185	3	1	0	0	0	51	0	0	0	0
Background Volume	54	910	136	95	87	35	47	767	101	79	147	60
	54	910	136	95	87	35	47	767	101	79	147	60
Project Trips	0	0	72	15	1	0	0	0	0	0	7	0
Project Conditions	54	910	208	110	88	35	47	767	101	79	154	60
	54	910	209	111	88	35	47	767	101	79	154	60

7	7		
Intersection Name:	Tunnel Ave & Lagoon Wy		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	05/25/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	0	39	14	11	0	133	167	141	2	0	0	0
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane	0	0	0	0	0	1	3	0	0	0	0	0
Total ATI	0	0	0	0	0	1	3	0	0	0	0	0
Background Volume	0	39	14	11	0	134	170	141	2	0	0	0
	0	39	14	11	0	134	170	141	2	0	0	0
Project Trips	0	0	13	3	0	16	79	0	0	0	0	0
Project Conditions	0	39	27	14	0	150	249	141	2	0	0	0
	0	39	27	14	0	151	250	141	2	0	0	0

8	8		
Intersection Name:	Sierra Point Pkwy & Lagoon Wy		
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/06/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	137	291	0	0	0	0	0	47	36	93	0	110
	137	291	0	0	0	0	0	47	36	93	0	110
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane	0	0	0	0	0	0	0	0	1	3	0	0
Total ATI	0	0	0	0	0	0	0	0	1	3	0	0
Background Volume	137	291	0	0	0	0	0	47	37	96	0	110
	137	291	0	0	0	0	0	47	37	96	0	110
Project Trips	0	319	0	0	0	0	0	50	18	92	0	0
Project Conditions	137	610	0	0	0	0	0	97	55	188	0	110
	137	616	0	0	0	0	0	100	57	189	0	110

9	9		
Intersection Name:	US 101 NB	& Sierra Point Pkwy	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/08/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	0	0	0	32	85	0	477	0	10	0	299	24
	0	0	0	32	85	0	477	0	10	0	299	24
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane	0	0	0	0	0	0	0	0	1	0	0	3
Total ATI	0	0	0	0	0	0	0	0	1	0	0	3
Background Volume	0	0	0	32	85	0	477	0	11	0	299	27
	0	0	0	32	85	0	477	0	11	0	299	27
Project Trips	0	0	0	66	68	0	241	0	0	0	409	0
Project Conditions	0	0	0	98	153	0	718	0	11	0	708	27
	0	0	0	102	158	0	723	0	11	0	717	27

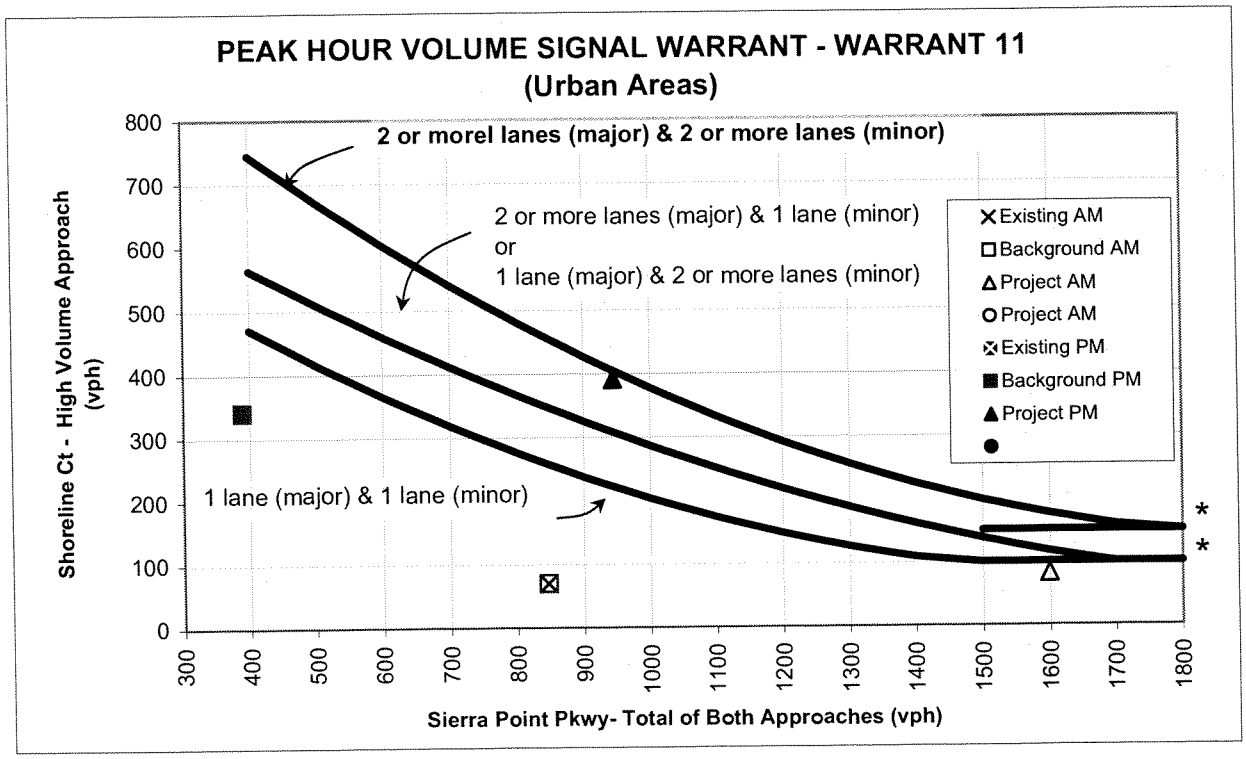
10	10		
Intersection Name:	Sierra Point Pkwy	& Shoreline Ct	
Peak Hour:	AM	Date of Analysis:	7/12/06
Scenario:	0	Count Date:	06/06/06
(SJ) Growth Factor:	0.003	Future Growth % Per Year:	0.331
(SJ) Number of Months:	0.0	Number of Years to Buildout:	0.0

	Movements											
	North Approach			East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	23	4	0	2	12	1	2	12	58	288	218	325
	23	4	0	2	12	1	2	12	58	288	218	325
Approved Project Trips												
South San Francisco												
San Francisco												
Brisbane												
Total ATI	0	0	0	0	0	0	0	0	0	0	0	0
Background Volume	23	4	0	2	12	1	2	12	58	288	218	325
	23	4	0	2	12	1	2	12	58	288	218	325
Project Trips	19	0	0	0	103	0	0	0	12	56	502	92
Project Conditions	42	4	0	2	115	1	2	12	70	344	720	417
	42	4	0	2	124	1	2	12	70	345	733	417

Appendix C-6

Signal Warrants

Sierra Point Biotech



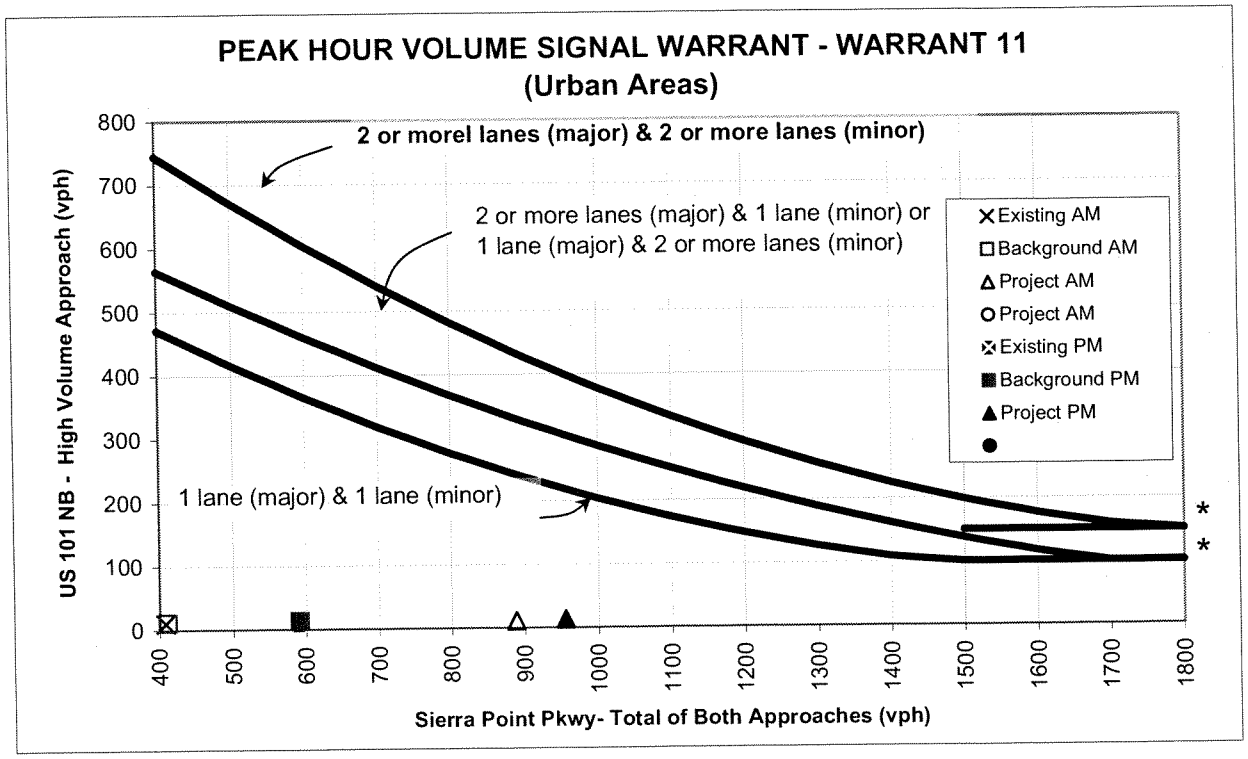
* NOTE: 150 vph applies as the lower shreshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

WARRANT 11 - Peak Hour Volume

		Approach Lanes		AM Peak Hour Volumes				
		One	2 or More	*Existing AM*	*Background AM*	*Project AM*		
Major Street - Both Approaches	Sierra Point Pkwy		x	846	846	1599		
Minor Street - Highest Approach	Shoreline Ct	x		70	70	82		
			Warrant Met?	No	No	No		

		Approach Lanes		PM Peak Hour Volumes				
		One	2 or More	*Existing PM*	*Background PM*	*Project PM*		
Major Street - Both Approaches	Sierra Point Pkwy		x	389	389	945		
Minor Street - Highest Approach	Shoreline Ct	x		341	341	391		
			Warrant Met?	No	No	Yes		

Sierra Point Biotech



* NOTE: 150 vph applies as the lower shreshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

WARRANT 11 - Peak Hour Volume

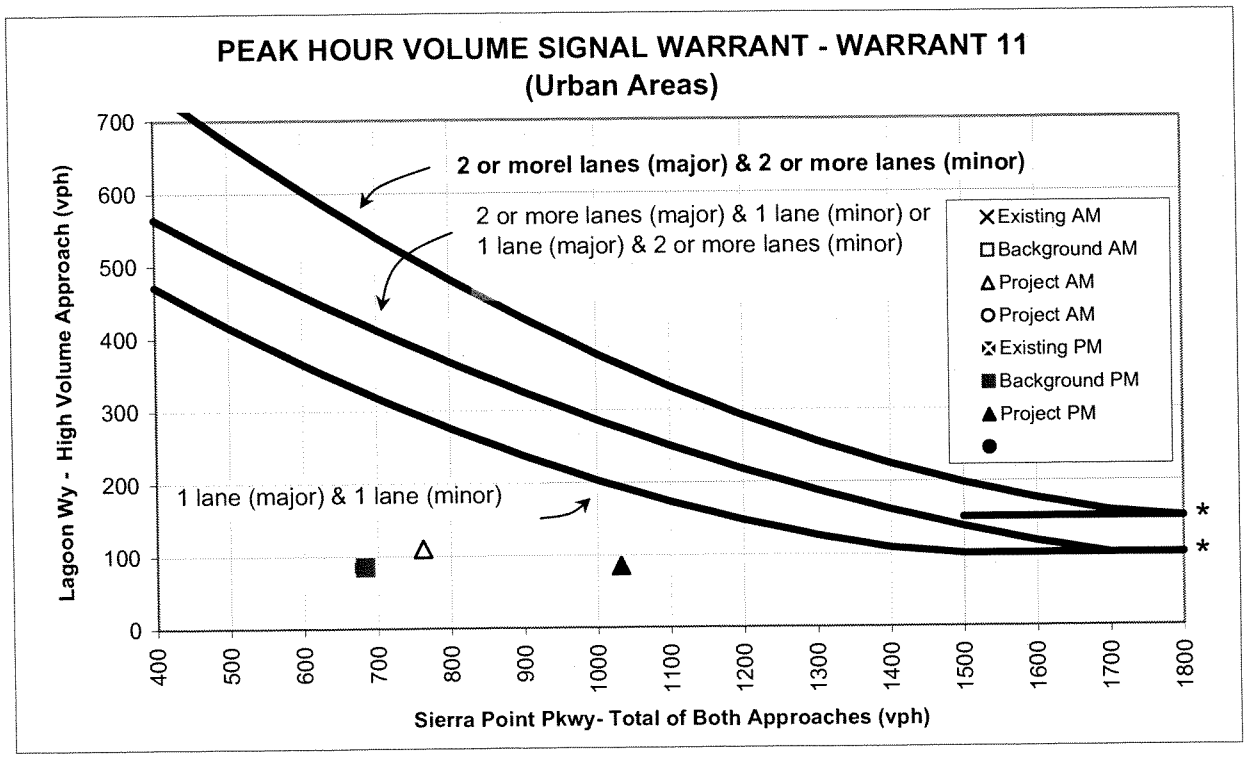
AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM		
Major Street - Both Approaches	Sierra Point Pkwy	x		408	411	888		
Minor Street - Highest Approach	US 101 NB	x		10	11	11		
	Warrant Met?			No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM		
Major Street - Both Approaches	Sierra Point Pkwy	x		589	591	955		
Minor Street - Highest Approach	US 101 NB	x		9	13	13		
	Warrant Met?			No	No	No		

Sierra Point Biotech



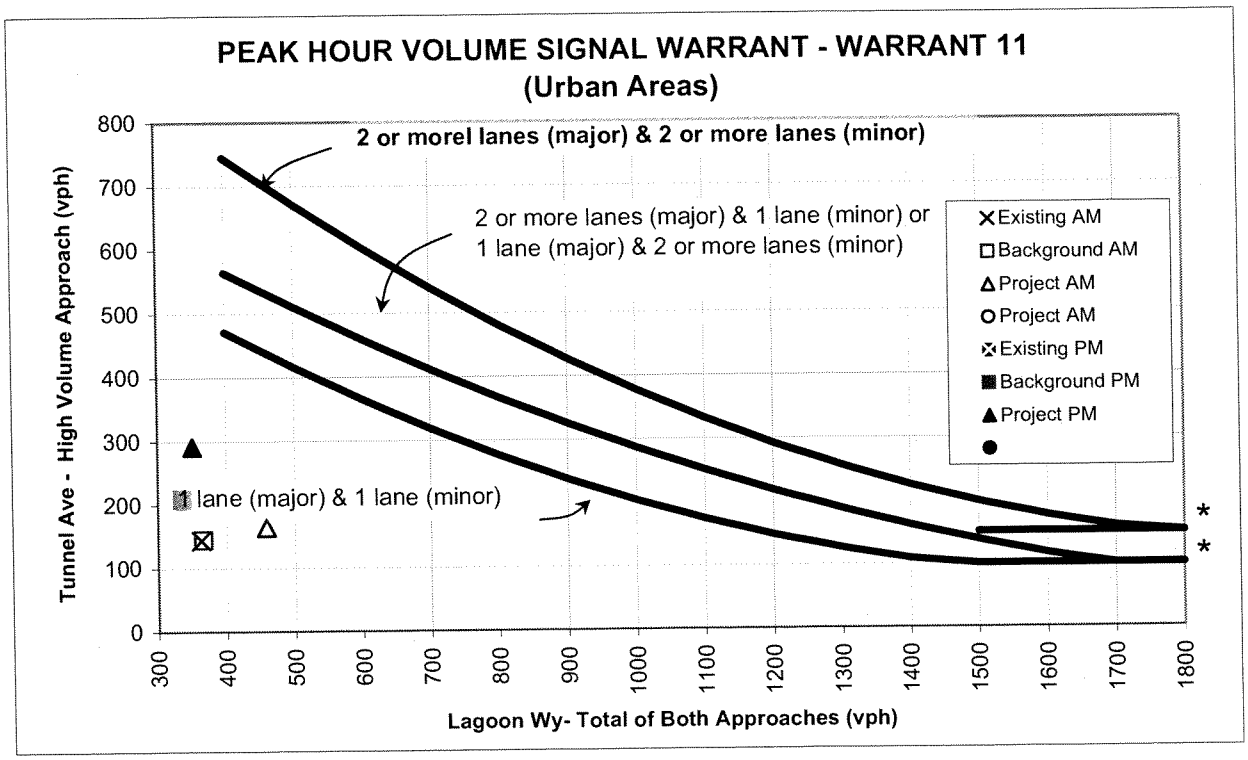
* NOTE: 150 vph applies as the lower shreshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

WARRANT 11 - Peak Hour Volume

		Approach Lanes		AM Peak Hour Volumes				
		One	2 or More	*Existing AM*	*Background AM*	*Project AM*		
Major Street - Both Approaches	Sierra Point Pkwy	x		374	375	762		
Minor Street - Highest Approach	Lagoon Wy	x		110	110	110		
	Warrant Met?			No	No	No		

		Approach Lanes		PM Peak Hour Volumes				
		One	2 or More	*Existing PM*	*Background PM*	*Project PM*		
Major Street - Both Approaches	Sierra Point Pkwy	x		679	683	1032		
Minor Street - Highest Approach	Lagoon Wy	x		85	85	85		
	Warrant Met?			No	No	No		

Sierra Point Biotech



* NOTE: 150 vph applies as the lower shreshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

WARRANT 11 - Peak Hour Volume

AM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing AM	Background AM	Project AM		
Major Street - Both Approaches	Lagoon Wy	x		363	366	458		
Minor Street - Highest Approach	Tunnel Ave	x		144	145	164		
	Warrant Met?			No	No	No		

PM Peak Hour Volumes

		Approach Lanes: One	Approach Lanes: 2 or More	Existing PM	Background PM	Project PM		
Major Street - Both Approaches	Lagoon Wy	x		334	336	351		
Minor Street - Highest Approach	Tunnel Ave	x		205	209	291		
	Warrant Met?			No	No	No		

Appendix C-7

Alternative Analyses

Alternative Analyses:

Analysis 1: Alternate Site Plan

This section describes the site access, circulation, and parking aspects of the alternative site plan for the proposed research and development project. This review is based on a project plan supplied to Hexagon and dated September 20, 2006 (see Figure F-1).

Site Access

The proposed site plan shows two project driveways on Sierra Point Parkway and one driveway on Shoreline Court. The three proposed project driveways are full-access, allowing for left-in, right-in, left-out, and right-out maneuvers. All project driveways would contain one inbound lane and one outbound lane. There is approximately 1,400 feet of property frontage on Sierra Point Parkway, which is sufficient for the two driveways. These driveways would meet the ITE spacing requirements listed in the Project chapter.

Based on the alternate site plan, the project would meet ITE standards with the following exceptions.

- Project driveway widths and curb radii are not shown on the site plan.
- Based on the site plan provided, Hexagon was unable to determine if proper alignment exists between the project driveways and any existing driveways opposite the project site. Generally, it is desirable for all opposing roadways to line up at their centerlines, or be offset sufficiently to allow for proper vehicle channelization. Depending on the movements permitted at these driveways, further analysis may need to be done.

Some general recommendations for the current site plan are as follows.

- In order to ensure there would be sufficient sight distance at the project driveways, it would be necessary to maintain some of the existing parking prohibitions on-street along the site frontages in the vicinity of the driveways. Any landscaping, parking, and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site.
- The project site should provide for a minimum 20-foot turning radius at the western driveway on Sierra Point Parkway and the driveway at Shoreline Court; and a minimum 15-foot radius at the eastern driveway on Sierra Point Parkway.
- The designer should confirm that the proposed access driveways are designed to not conflict with the traffic signal and related improvement plans at the Sierra Point Parkway and Shoreline Court intersection (reference Second Amendment to Project Approval dated 11/17/03 between the City of Brisbane and Sierra Point, L.L.C.).

Under this alternative site plan, traffic volumes would be redistributed at the intersection of Sierra Point Parkway and Shoreline Court (Original site plan had 90% of the project site traffic accessing the Sierra Point Parkway driveways and 10% accessing via Shoreline Court. Under the alternate site plan, 75% of the project site traffic would take access via the Sierra Point Parkway driveways and 25% would access the site via Shoreline Court). However, the level of service would remain at LOS B during the AM peak

hour and LOS F during the PM peak hour. The average delay at the intersection would remain unchanged during the AM peak hour and would increase by 12 seconds during the PM peak hour. By signalizing this intersection and assuming all of the recommended mitigation in this report is implemented, the intersection would operate at LOS B during the AM peak hour and LOS D during the PM peak hour.

Site Circulation

The onsite circulation was reviewed in accordance with generally accepted traffic engineering standards. Generally, the proposed plan would provide adequate connectivity through the parking areas for vehicles. The project would provide 90-degree parking throughout the site. There is one proposed dead-end aisle at the southwest end of the project site. Dead end aisles are undesirable because drivers can enter the aisle, and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic.

The design of the site circulation and access for the parking structure should consider the driveway and ramp width to the structure, the ramp slope, the ramp vertical clearance, the inside turning radius at all locations of change in aisle direction, and the width of the drive aisles. The ramp design is not shown and therefore could not be evaluated.

Parking

According to Slough Estates International, the project applicant, the proposed development would consist of 540,185 s.f. of office/R&D space and 2,500 s.f. of retail space. Based on the size of the development, the applicant is proposing 572 surface parking spaces, 137 parking spaces within Building C, a four-story parking structure at the southwest corner of the project site consisting of 412 parking spaces, and a five-story parking structure at the northeast corner of the project site consisting of 678 parking spaces. This brings the total parking spaces provided by the proposed project to 1,799 spaces. However, the current level of detail on the site plan shows only one level of parking for each parking structure and the 572 surface spaces distributed throughout the site.

The project applicant should demonstrate that the proposed plan would comply with the City of Brisbane parking standard which states 3 parking spaces per 1,000 square feet. Based on this rate, the proposed project should provide 1,621 parking spaces for the R&D uses and an additional 9 parking spaces for retail uses. Therefore, the proposed project should provide a total of 1,628 parking spaces.

The project proposes 1,799 on-site parking spaces. This is more than the 1,628 on-site parking spaces that would be required based on the City of Brisbane parking code.

Based on these calculations the project would satisfy the minimum on-site parking requirements.

Analysis 2: No Project Under Existing General Plan

The No Project alternative, assumes the development of a 630,000 square feet office park on the project site as currently approved under the Sierra Point Master Plan. This alternative would not require General Plan or Zoning Ordinance amendments and was conceptually approved by the City in the 1984 Development Agreement.

Trip Generation

The amount of traffic generated by the No Project scenario was estimated by applying the appropriate trip generation rates to the size of the development. The trip generation rates used were those published in the *ITE Trip Generation Manual, Seventh Edition, 2003* for office parks. Based on these rates, the project is estimated to generate 1,096 AM peak-hour trips and 945 PM peak-hour trips. Using the inbound/outbound splits recommended by ITE, the project would produce 975 inbound and 121 outbound trips during the AM peak hour, and 132 inbound and 813 outbound trips during the PM peak hour. The project's trip generation estimates are presented in Table 1-A. The No Project trip distribution was the same as that used for the proposed project.

Table A-1
Project Trip Generation

		AM Peak Hour						PM Peak Hour					
Land Use	Size[1]	rate	% in	% out	total	in	out	rate	% in	% out	total	in	out
R & D	630.0	1.74	89%	11%	1096	975	121	1.50	14%	86%	945	132	813

Source: Office Park (750) ITE *Trip Generation*, Seventh Edition, 2003.
[1] Size is expressed in 1000 square feet.

Intersection Level of Service Analysis

The results of the level of service analysis under project conditions are summarized in Table 9. Under No Project conditions, the results show that three of the study intersections would operate at an unacceptable LOS measured against the City of Brisbane level of service guidelines. The unsignalized intersection of Sierra Point Parkway/US 101 NB Ramp would operate at LOS F during the AM peak hour. The unsignalized intersection of Sierra Point Parkway/Lagoon Way would operate at LOS F during both the AM and PM peak hours. The unsignalized intersection of Sierra Point Parkway/Shoreline Court would operate at LOS F during the PM peak hour. The remaining study intersections would operate at an acceptable LOS.

Table A-11
No Project Condition Levels of Service

Intersection	Peak Hour	Background Ave. Delay	Background LOS	Project Conditions Ave. Delay	Project Conditions LOS	Incr. In Crit Delay	Incr. In Crit V/C
1. Bayshore Blvd and Sister Cities/Oyster Point Blvd	AM	32.4	C	34.3	C	1.3	0.012
	PM	31.0	C	31.4	C	0.7	0.008
2. Alemany Blvd and Congdon St	AM	14.1	B	14.1	B	0.0	0.006
	PM	14.9	B	14.9	B	0.0	0.003
3. Alemany Blvd and Geneva Ave	AM	36.0	D	36.1	D	0.1	0.001
	PM	33.4	C	33.4	C	0.1	0.007
4. Mission St and Geneva Ave	AM	10.3	B	10.3	B	0.0	0.002
	PM	10.9	B	10.9	B	0.0	0.010
5. Bayshore Blvd and Geneva Ave	AM	16.4	B	16.4	B	0.1	0.004
	PM	18.2	B	18.4	B	0.0	0.023
6. Bayshore Blvd and Old County Road*	AM	20.4	C	22.7	C	4.9	0.059
	PM	22.1	C	23.0	C	0.7	0.016
7. Tunnel Ave and Lagoon Wy	AM	8.9	A	10.1	B	1.2	0.134
	PM	9.2	A	10.6	B	1.2	0.112
8. Sierra Point Pkwy and Lagoon Wy	AM	9.9	A	79.1	F	69.2	0.801
	PM	16.9	C	84.6	F	67.8	0.469
9. Sierra Point Pkwy and US 101 NB Ramps	AM	17.9	C	702.8	F	-	-
	PM	9.9	A	12.2	B	-	-
10. Sierra Point Pkwy and Shoreline Ct	AM	10.4	B	18.4	C	8.0	0.235
	PM	18.4	C	136.9	F	118.6	0.837

* Per City of Brisbane level of service guidelines, intersection must remain at LOS C or better.

Project Signal Warrants

The peak-hour signal warrant was checked for the four unsignalized intersections to determine whether signalization would be justified on the basis of project peak-hour volumes. The analysis showed that under project conditions the intersection of Sierra Point Parkway/Shoreline Court would meet the signal warrant during the PM peak hour. The other three unsignalized study intersections do not meet the peak-hour volume warrant.

Project Freeway Segment Analysis

Project traffic volumes on freeway segments were established by adding to existing freeway volumes the estimated project trips on freeway segments. The results of the analysis are summarized in Table A-3. The results show that none of the directional freeway segments analyzed would operate at an unacceptable LOS F during at least one of the peak hours under project conditions. All of the analyzed freeway segments would operate at an acceptable LOS E or better during the AM and PM peak hours.

Table A-12
No Project Freeway Levels of Service

				Existing Plus Project Trips				Project Trips	
Freeway	Segment	Direction	Peak Hour	# of Lanes	Volume/a/	V/C	LOS	Volume	% Capacity
US 101	Harney Wy to Sierra Point Pkwy	SB	AM	4	9,134	0.99	E	478	5.2%
			PM	4	7,840	0.85	D	65	0.7%
US 101	Sierra Point Pkwy to Oyster Point Blvd	SB	AM	4	7,400	0.80	D	45	0.5%
			PM	4	7,714	0.84	D	301	3.3%
I - 280	Alemany Blvd to San Jose Ave	SB	AM	4	5,459	0.59	A	1	0.0%
			PM	4	8,659	0.94	E	8	0.1%
US 101	Oyster Point Blvd to Sierra Point Pkwy	NB	AM	4	7,844	0.85	D	360	3.9%
			PM	4	8,460	0.92	E	48	0.5%
US 101	Sierra Point Pkwy to Harney Wy	NB	AM	4	7,226	0.79	C	59	0.6%
			PM	4	7,991	0.87	D	398	4.3%
I - 280	San Jose Ave to Alemany Blvd	NB	AM	4	7,676	0.83	D	10	0.1%
			PM	4	5,689	0.62	B	1	0.0%

/a/ Source: Caltrans freeway count data.

Transit Impacts

Transit service in the project vicinity would be provided via Caltrain, BART, Light Rail, and several Samtrans operated bus routes. Assuming up to three percent transit mode share for the project equates to approximately 33 new transit riders during the AM peak commute period and 28 new transit riders during the PM peak period. These new riders easily could be accommodated by the available ridership capacity of the nearby bus and rail lines. Thus, no major improvements to the existing transit facilities would be necessary. However, Samtrans may consider adjusting the schedules for bus routes near the project site to accommodate any shift in ridership patterns.

Appendix C-8

Mitigation LOS Calculations

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 sierra point pkwy and US 101 NB

Cycle (sec):	90	Critical Vol./Cap. (X):	0.870
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	31.4
Optimal Cycle:	86	Level Of Service:	C

Street Name:	US 101 NB						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Lanes:	0	1	0 0	1	0 0	0 0	0	1	0 1	0 0	0	0 1
Volume Module:												
Base Vol:	11	0	718	0	0	0	27	708	0	0	153	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	718	0	0	0	27	708	0	0	153	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	718	0	0	0	27	708	0	0	153	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	718	0	0	0	27	708	0	0	153	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	0	718	0	0	0	27	708	0	0	153	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	0	718	0	0	0	27	708	0	0	153	98
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	0	0	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.41	0.00	0.00	0.00	0.02	0.37	0.00	0.00	0.08	0.06
Crit Moves:			****					****			****	
Green Time:	42.4	0.0	42.4	0.0	0.0	0.0	15.9	38.6	0.0	0.0	22.7	22.7
Volume/Cap:	0.01	0.00	0.87	0.00	0.00	0.00	0.09	0.87	0.00	0.00	0.32	0.22
Delay/Veh:	12.6	0.0	31.2	0.0	0.0	0.0	31.1	33.4	0.0	0.0	27.8	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.6	0.0	31.2	0.0	0.0	0.0	31.1	33.4	0.0	0.0	27.8	26.9
DesignQueue:	0	0	21	0	0	0	1	22	0	0	6	4

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 sierra point pkwy and US 101 NB

Cycle (sec):	90	Critical Vol./Cap. (X):	0.492
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	9.7
Optimal Cycle:	36	Level Of Service:	A

Street Name:	US 101 NB						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Lanes:	0	1	0 0	1	0 0	0 0	1	0	1 0	0 0	0	1 0
Volume Module:												
Base Vol:	13	0	115	0	0	0	25	129	0	0	801	702
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	0	115	0	0	0	25	129	0	0	801	702
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	0	115	0	0	0	25	129	0	0	801	702
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	0	115	0	0	0	25	129	0	0	801	702
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	0	115	0	0	0	25	129	0	0	801	702
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	13	0	115	0	0	0	25	129	0	0	801	702
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	0	0	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.07	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.42	0.40
Crit Moves:	****						****				****	
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	7.0	71.0	0.0	0.0	64.0	64.0
Volume/Cap:	0.07	0.00	0.59	0.00	0.00	0.00	0.18	0.09	0.00	0.00	0.59	0.56
Delay/Veh:	36.0	0.0	42.8	0.0	0.0	0.0	39.5	2.2	0.0	0.0	7.2	6.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.0	0.0	42.8	0.0	0.0	0.0	39.5	2.2	0.0	0.0	7.2	6.9
DesignQueue:	1	0	5	0	0	0	1	1	0	0	13	11

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 sierra point pkwy and lagoon wy

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: C[18.2]

Street Name:	sierra point pkwy									lagoon wy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	55	97	0	0	610	137	110	0	188	0	0	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	55	97	0	0	610	137	110	0	188	0	0	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	55	97	0	0	610	137	110	0	188	0	0	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	55	97	0	0	610	137	110	0	188	0	0	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	55	97	0	0	610	137	110	0	188	0	0	0								
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx								
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	747	xxxx	xxxxx	xxxx	xxxx	xxxxx	817	xxxx	610	xxxx	xxxx	xxxxx								
Potent Cap.:	870	xxxx	xxxxx	xxxx	xxxx	xxxxx	349	xxxx	498	xxxx	xxxx	xxxxx								
Move Cap.:	870	xxxx	xxxxx	xxxx	xxxx	xxxxx	332	xxxx	498	xxxx	xxxx	xxxxx								
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.33	xxxx	0.38	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.4	xxxx	1.7	xxxxx	xxxx	xxxxx								
Stopped Del:	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	21.1	xxxx	16.5	xxxxx	xxxx	xxxxx								
LOS by Move:	A	*	*	*	*	*	C	*	C	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			xxxxxx			18.2			xxxxxx										
ApproachLOS:	*			*			C			*										

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 sierra point pkwy and lagoon wy

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: D[27.2]

Street Name:	sierra point pkwy									lagoon wy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	178	760	0	0	94	170	85	0	64	0	0	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	178	760	0	0	94	170	85	0	64	0	0	0								
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	178	760	0	0	94	170	85	0	64	0	0	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	178	760	0	0	94	170	85	0	64	0	0	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	178	760	0	0	94	170	85	0	64	0	0	0								
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx								
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	264	xxxx	xxxxx	xxxx	xxxx	xxxxx	1210	xxxx	94	xxxx	xxxx	xxxxx								
Potent Cap.:	1312	xxxx	xxxxx	xxxx	xxxx	xxxxx	204	xxxx	968	xxxx	xxxx	xxxxx								
Move Cap.:	1312	xxxx	xxxxx	xxxx	xxxx	xxxxx	182	xxxx	968	xxxx	xxxx	xxxxx								
Volume/Cap:	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	0.47	xxxx	0.07	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	0.2	xxxxx	xxxx	xxxxx								
Stopped Del:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	40.9	xxxx	9.0	xxxxx	xxxx	xxxxx								
LOS by Move:	A	*	*	*	*	*	E	*	A	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			xxxxxx			27.2			xxxxxx										
ApproachLOS:	*			*			D			*										

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 sierra point pkwy and shoreline ct

Cycle (sec):	75	Critical Vol./Cap. (X):	0.329
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.7
Optimal Cycle:	49	Level Of Service:	B

Street Name:	shoreline ct						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	1	0 1	0 1	1	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	70	12	2	0	4	42	417	720	344	1	115	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	12	2	0	4	42	417	720	344	1	115	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	70	12	2	0	4	42	417	720	344	1	115	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	12	2	0	4	42	417	720	344	1	115	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	12	2	0	4	42	417	720	344	1	115	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	70	12	2	0	4	42	417	720	344	1	115	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	0	3700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.01	0.00	0.00	0.00	0.02	0.24	0.19	0.20	0.00	0.03	0.00
Crit Moves:		****			****		****				****	
Green Time:	10.0	10.0	24.2	0.0	10.0	10.0	33.0	28.8	38.8	14.2	10.0	10.0
Volume/Cap:	0.30	0.05	0.00	0.00	0.01	0.18	0.54	0.49	0.38	0.00	0.23	0.01
Delay/Veh:	30.0	28.4	17.2	0.0	28.2	29.2	16.2	17.8	11.1	24.7	29.3	28.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	28.4	17.2	0.0	28.2	29.2	16.2	17.8	11.1	24.7	29.3	28.2
DesignQueue:	3	0	0	0	0	2	10	19	7	0	4	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 sierra point pkwy and shoreline ct

Cycle (sec):	75	Critical Vol./Cap. (X):	0.818
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	40.3
Optimal Cycle:	73	Level Of Service:	D

Street Name:	shoreline ct						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	0 1	1	0 1	0 1	1	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	383	8	0	0	3	471	37	135	90	4	677	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	383	8	0	0	3	471	37	135	90	4	677	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	383	8	0	0	3	471	37	135	90	4	677	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	383	8	0	0	3	471	37	135	90	4	677	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	383	8	0	0	3	471	37	135	90	4	677	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	383	8	0	0	3	471	37	135	90	4	677	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	0	3700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.00	0.00	0.00	0.27	0.02	0.04	0.05	0.00	0.18	0.00
Crit Moves:	****					****	****				****	
Green Time:	18.4	18.4	0.0	0.0	22.6	22.6	7.0	12.9	31.3	9.0	15.0	15.0
Volume/Cap:	0.89	0.02	0.00	0.00	0.00	0.89	0.23	0.21	0.12	0.02	0.89	0.01
Delay/Veh:	47.3	21.4	0.0	0.0	18.3	42.2	32.2	26.8	13.5	29.1	42.1	24.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.3	21.4	0.0	0.0	18.3	42.2	32.2	26.8	13.5	29.1	42.1	24.1
DesignQueue:	13	0	0	0	0	15	1	5	2	0	24	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 sierra point pkwy and US 101 NB

Cycle (sec): 90 Critical Vol./Cap. (X): 1.270
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 130.3
Optimal Cycle: 180 Level Of Service: F

Street Name:	US 101 NB						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Lanes:	0	1	0 0	1	0	0 0	0	1	0 0	0	0	1 0 1
Volume Module:												
Base Vol:	225	0	1506	0	0	0	238	449	0	0	279	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	225	0	1506	0	0	0	238	449	0	0	279	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	225	0	1506	0	0	0	238	449	0	0	279	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	225	0	1506	0	0	0	238	449	0	0	279	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	225	0	1506	0	0	0	238	449	0	0	279	94
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	225	0	1506	0	0	0	238	449	0	0	279	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	0	0	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.86	0.00	0.00	0.00	0.14	0.24	0.00	0.00	0.15	0.05
Crit Moves:			****				****				****	
Green Time:	61.0	0.0	61.0	0.0	0.0	0.0	9.6	20.0	0.0	0.0	10.4	10.4
Volume/Cap:	0.18	0.00	1.27	0.00	0.00	0.00	1.27	1.06	0.00	0.00	1.27	0.46
Delay/Veh:	5.4	0.0	143.0	0.0	0.0	0.0	196.9	96.0	0.0	0.0	192	38.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	0.0	143.0	0.0	0.0	0.0	196.9	96.0	0.0	0.0	192	38.9
DesignQueue:	4	0	31	0	0	0	11	19	0	0	13	4

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 sierra point pkwy and US 101 NB

Cycle (sec): 90 Critical Vol./Cap. (X): 0.664
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 46 Level Of Service: C

Street Name:	US 101 NB						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Lanes:	0	1	0 0	1	0	0 0	0	1	0 1	0	0	1 0 1
Volume Module:												
Base Vol:	45	0	383	0	0	0	106	338	0	0	605	414
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	0	383	0	0	0	106	338	0	0	605	414
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	0	383	0	0	0	106	338	0	0	605	414
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	0	383	0	0	0	106	338	0	0	605	414
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	0	383	0	0	0	106	338	0	0	605	414
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	45	0	383	0	0	0	106	338	0	0	605	414
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	0	0	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.22	0.00	0.00	0.00	0.06	0.18	0.00	0.00	0.32	0.24
Crit Moves:			****				****				****	
Green Time:	29.7	0.0	29.7	0.0	0.0	0.0	8.2	51.3	0.0	0.0	43.1	43.1
Volume/Cap:	0.08	0.00	0.66	0.00	0.00	0.00	0.66	0.31	0.00	0.00	0.66	0.49
Delay/Veh:	20.8	0.0	28.8	0.0	0.0	0.0	49.7	10.3	0.0	0.0	19.8	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.8	0.0	28.8	0.0	0.0	0.0	49.7	10.3	0.0	0.0	19.8	16.4
DesignQueue:	2	0	14	0	0	0	5	8	0	0	17	11

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 sierra point pkwy and shoreline ct

Cycle (sec): 75 Critical Vol./Cap. (X): 0.250
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 12.3
Optimal Cycle: 49 Level Of Service: B

Street Name:	shoreline ct						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 1	0	0 1	0 1	1	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	104	2	0	0	1	40	295	158	256	0	43	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	2	0	0	1	40	295	158	256	0	43	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	104	2	0	0	1	40	295	158	256	0	43	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	2	0	0	1	40	295	158	256	0	43	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	2	0	0	1	40	295	158	256	0	43	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	104	2	0	0	1	40	295	158	256	0	43	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.92	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.96	0.04	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3483	67	1750	0	3700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.00	0.00	0.00	0.02	0.17	0.04	0.15	0.00	0.01	0.00
Crit Moves:		****			****		****				****	
Green Time:	10.0	10.0	0.0	0.0	10.0	43.0	33.0	43.0	53.0	0.0	10.0	20.0
Volume/Cap:	0.22	0.22	0.00	0.00	0.00	0.04	0.38	0.07	0.21	0.00	0.08	0.00
Delay/Veh:	29.3	29.3	0.0	0.0	28.2	7.0	14.5	7.1	3.9	0.0	28.6	20.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.3	29.3	0.0	0.0	28.2	7.0	14.5	7.1	3.9	0.0	28.6	20.2
DesignQueue:	4	0	0	0	0	1	7	3	3	0	2	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 sierra point pkwy and shoreline ct

Cycle (sec): 75 Critical Vol./Cap. (X): 0.991
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 51.6
Optimal Cycle: 136 Level Of Service: D

Street Name:	shoreline ct						sierra point pkwy					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 1	0	0 1	0 1	1	0 1	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	733	17	0	0	6	868	56	90	183	8	477	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	733	17	0	0	6	868	56	90	183	8	477	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	733	17	0	0	6	868	56	90	183	8	477	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	733	17	0	0	6	868	56	90	183	8	477	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	733	17	0	0	6	868	56	90	183	8	477	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	733	17	0	0	6	868	56	90	183	8	477	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.92	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.96	0.04	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3470	80	1750	0	3700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.00	0.00	0.00	0.50	0.03	0.02	0.10	0.00	0.13	0.00
Crit Moves:	****					****	****				****	
Green Time:	15.8	15.8	0.0	0.0	30.2	37.2	7.0	10.0	25.8	7.0	10.0	40.2
Volume/Cap:	1.00	1.00	0.00	0.00	0.00	1.00	0.34	0.18	0.30	0.05	0.94	0.00
Delay/Veh:	62.7	62.7	0.0	0.0	13.4	49.7	33.1	29.0	18.3	31.1	58.2	8.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.7	62.7	0.0	0.0	13.4	49.7	33.1	29.0	18.3	31.1	58.2	8.1
DesignQueue:	25	1	0	0	0	21	2	3	5	0	18	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Sierra Point Pkwy and Lagoon Wy

Cycle (sec): 70 Critical Vol./Cap. (X): 0.590
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.6
Optimal Cycle: 38 Level Of Service: C

Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Lanes:	1 0	1 0	0	0 0	1 0	1	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	312	111	0	0	301	397	191	0	210	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	312	111	0	0	301	397	191	0	210	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	111	0	0	301	397	191	0	210	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	312	111	0	0	301	397	191	0	210	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	312	111	0	0	301	397	191	0	210	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	312	111	0	0	301	397	191	0	210	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	1900	0	0	1900	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.06	0.00	0.00	0.16	0.23	0.11	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****					****	****					
Green Time:	20.7	47.1	0.0	0.0	26.4	26.4	13.9	0.0	13.9	0.0	0.0	0.0
Volume/Cap:	0.60	0.09	0.00	0.00	0.42	0.60	0.55	0.00	0.60	0.00	0.00	0.00
Delay/Veh:	23.1	4.0	0.0	0.0	16.6	19.2	27.0	0.0	28.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.1	4.0	0.0	0.0	16.6	19.2	27.0	0.0	28.5	0.0	0.0	0.0
DesignQueue:	9	1	0	0	8	10	6	0	7	0	0	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Sierra Point Pkwy and Lagoon Wy

Cycle (sec): 70 Critical Vol./Cap. (X): 0.744
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 17.4
Optimal Cycle: 53 Level Of Service: B

Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Lanes:	1 0	1 0	0	0 0	1 0	1	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	265	1063	0	0	212	496	155	0	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	265	1063	0	0	212	496	155	0	230	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	265	1063	0	0	212	496	155	0	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	265	1063	0	0	212	496	155	0	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	265	1063	0	0	212	496	155	0	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	265	1063	0	0	212	496	155	0	230	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	1900	0	0	1900	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.56	0.00	0.00	0.11	0.28	0.09	0.00	0.13	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green Time:	17.2	49.4	0.0	0.0	32.2	32.2	11.6	0.0	11.6	0.0	0.0	0.0
Volume/Cap:	0.62	0.79	0.00	0.00	0.24	0.62	0.53	0.00	0.79	0.00	0.00	0.00
Delay/Veh:	26.2	10.2	0.0	0.0	11.6	15.7	28.7	0.0	41.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.2	10.2	0.0	0.0	11.6	15.7	28.7	0.0	41.9	0.0	0.0	0.0
DesignQueue:	8	14	0	0	5	11	5	0	8	0	0	0

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Bayshore Blvd and Old County Rd

Cycle (sec):	75	Critical Vol./Cap. (X):	0.847
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	34.6
Optimal Cycle:	79	Level Of Service:	C

Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Lanes:	1 0	2	0 1	2 0	2	0 1	1 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1418	34	200	477	142	371	335	78	12	124	207
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1418	34	200	477	142	371	335	78	12	124	207
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1418	34	200	477	142	371	335	78	12	124	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	129	1418	34	200	477	142	371	335	78	12	124	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.06	0.94	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1865	1684	1750	159	1641	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.02	0.06	0.13	0.08	0.20	0.20	0.04	0.08	0.08	0.12
Crit Moves:		****		****				****			****	
Green Time:	15.2	30.0	40.0	7.0	21.8	37.8	16.0	16.0	16.0	10.0	10.0	10.0
Volume/Cap:	0.36	0.93	0.04	0.68	0.43	0.16	0.93	0.93	0.21	0.57	0.57	0.89
Delay/Veh:	26.3	32.3	8.3	39.3	21.9	10.1	47.3	47.3	24.6	33.6	33.6	62.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.3	32.3	8.3	39.3	21.9	10.1	47.3	47.3	24.6	33.6	33.6	62.8
DesignQueue:	4	39	1	8	15	3	13	12	3	0	5	8

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Bayshore Blvd and Old County Rd

Cycle (sec):	75	Critical Vol./Cap. (X):	0.880
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	31.1
Optimal Cycle:	87	Level Of Service:	C

Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Lanes:	1 0	2	0 1	1 0	2	0 1	2 0	1	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1418	34	200	477	142	371	335	78	12	124	207
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1418	34	200	477	142	371	335	78	12	124	207
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1418	34	200	477	142	371	335	78	12	124	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	129	1418	34	200	477	142	371	335	78	12	124	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	3150	1900	1750	159	1641	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.02	0.11	0.13	0.08	0.12	0.18	0.04	0.08	0.08	0.12
Crit Moves:		****		****				****			****	
Green Time:	17.1	31.8	41.9	9.7	24.4	39.5	15.0	15.0	15.0	10.1	10.1	10.1
Volume/Cap:	0.32	0.88	0.03	0.88	0.39	0.15	0.59	0.88	0.22	0.56	0.56	0.88
Delay/Veh:	24.6	25.8	7.5	62.2	19.7	9.2	28.6	49.5	25.4	33.4	33.4	61.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	25.8	7.5	62.2	19.7	9.2	28.6	49.5	25.4	33.4	33.4	61.3
DesignQueue:	4	38	1	7	14	3	13	12	3	0	5	8

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Bayshore Blvd and Old County Rd

Cycle (sec):	75		Critical Vol./Cap. (X):		0.861
Loss Time (sec):	12 (Y+R =	4 sec)	Average Delay (sec/veh):		29.2
Optimal Cycle:	82		Level Of Service:		C

Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	0	1 1	0 1
Volume Module:												
Base Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1418	34	200	477	142	371	335	78	12	124	207
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1418	34	200	477	142	371	335	78	12	124	207
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1418	34	200	477	142	371	335	78	12	124	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1418	34	200	477	142	371	335	78	12	124	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	129	1418	34	200	477	142	371	335	78	12	124	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92	0.95	0.98	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.06	0.94	1.00	0.18	1.82	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1865	1684	1750	326	3373	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.02	0.11	0.13	0.08	0.20	0.20	0.04	0.04	0.04	0.12
Crit Moves:		****		****				****			****	
Green Time:	17.5	32.5	42.8	10.0	25.0	42.3	17.3	17.3	17.3	10.3	10.3	10.3
Volume/Cap:	0.32	0.86	0.03	0.86	0.38	0.14	0.86	0.86	0.19	0.27	0.27	0.86
Delay/Veh:	24.3	24.1	7.1	58.1	19.3	7.8	36.9	36.9	23.4	29.3	29.3	57.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.3	24.1	7.1	58.1	19.3	7.8	36.9	36.9	23.4	29.3	29.3	57.2
DesignQueue:	4	37	1	7	14	3	12	11	3	0	4	8

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Bayshore Blvd and Old County Rd

Cycle (sec):	75		Critical Vol./Cap. (X):		0.882
Loss Time (sec):	12 (Y+R =	4 sec)	Average Delay (sec/veh):		32.3
Optimal Cycle:	88		Level Of Service:		C

Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Lanes:	1	0 2	0 1	2	0 2	0 1	1	1 0	0 1	0	1 0	0 1
Volume Module:												
Base Vol:	108	922	20	346	1378	246	246	192	128	31	316	193
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	922	20	346	1378	246	246	192	128	31	316	193
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	922	20	346	1378	246	246	192	128	31	316	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	922	20	346	1378	246	246	192	128	31	316	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	922	20	346	1378	246	246	192	128	31	316	193
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	108	922	20	346	1378	246	246	192	128	31	316	193
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.14	0.86	1.00	0.09	0.91	1.00
Final Sat.:	1750	3800	1750	3150	3800	1750	1994	1556	1750	161	1639	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.01	0.11	0.36	0.14	0.12	0.12	0.07	0.19	0.19	0.11
Crit Moves:	****				****			****			****	
Green Time:	7.0	25.4	41.3	11.5	29.9	40.1	10.2	10.2	10.2	15.9	15.9	15.9
Volume/Cap:	0.66	0.72	0.02	0.72	0.91	0.26	0.91	0.91	0.54	0.91	0.91	0.52
Delay/Veh:	42.5	23.6	7.7	35.3	29.7	9.6	53.0	53.0	32.7	53.9	53.9	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.5	23.6	7.7	35.3	29.7	9.6	53.0	53.0	32.7	53.9	53.9	27.5
DesignQueue:	4	27	0	13	38	5	9	7	5	1	11	7

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Bayshore Blvd and Old County Rd

Cycle (sec): 75 Critical Vol./Cap. (X): 0.855
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 81 Level Of Service: C

Street Name:	Bayshore Blvd									Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Protected			Protected			Split Phase			Split Phase					
Rights:		Ovl			Ovl			Include			Include				
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10			
Lanes:	1	0 2	0 1	1	0 2	0 1	2	0 1	0 1	0	1 0	0 1			
Volume Module:															
Base Vol:	108	922	20	346	1378	246	246	192	128	31	316	193			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	108	922	20	346	1378	246	246	192	128	31	316	193			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	108	922	20	346	1378	246	246	192	128	31	316	193			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	108	922	20	346	1378	246	246	192	128	31	316	193			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	108	922	20	346	1378	246	246	192	128	31	316	193			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Final Vol.:	108	922	20	346	1378	246	246	192	128	31	316	193			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.95	0.95	0.92			
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	0.09	0.91	1.00			
Final Sat.:	1750	3800	1750	1750	3800	1750	3150	1900	1750	161	1639	1750			
Capacity Analysis Module:															
Vol/Sat:	0.06	0.24	0.01	0.20	0.36	0.14	0.08	0.10	0.07	0.19	0.19	0.11			
Crit Moves:	****				****			****		****					
Green Time:	7.0	20.4	36.4	16.6	30.0	40.0	10.0	10.0	10.0	16.0	16.0	16.0			
Volume/Cap:	0.66	0.89	0.02	0.89	0.91	0.26	0.59	0.76	0.55	0.91	0.91	0.52			
Delay/Veh:	42.5	36.1	10.1	50.1	29.2	9.6	32.7	43.7	33.1	53.1	53.1	27.4			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	42.5	36.1	10.1	50.1	29.2	9.6	32.7	43.7	33.1	53.1	53.1	27.4			
DesignQueue:	4	30	0	12	38	5	9	7	5	1	11	7			

Sierra Point Biotech

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Bayshore Blvd and Old County Rd

Cycle (sec): 75 Critical Vol./Cap. (X): 0.764
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.0
Optimal Cycle: 64 Level Of Service: C

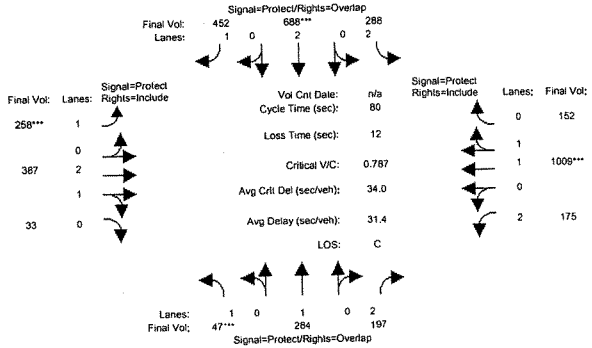
Street Name:	Bayshore Blvd									Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Protected			Protected			Split Phase			Split Phase					
Rights:		Ovl			Ovl			Include			Include				
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10			
Lanes:	1	0 2	0 1	1	0 2	0 1	1	1 0	0 1	0	1 1	0 1			
Volume Module:															
Base Vol:	108	922	20	346	1378	246	246	192	128	31	316	193			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	108	922	20	346	1378	246	246	192	128	31	316	193			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	108	922	20	346	1378	246	246	192	128	31	316	193			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	108	922	20	346	1378	246	246	192	128	31	316	193			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	108	922	20	346	1378	246	246	192	128	31	316	193			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Final Vol.:	108	922	20	346	1378	246	246	192	128	31	316	193			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92	0.95	0.98	0.92			
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.14	0.86	1.00	0.18	1.82	1.00			
Final Sat.:	1750	3800	1750	1750	3800	1750	1994	1556	1750	331	3369	1750			
Capacity Analysis Module:															
Vol/Sat:	0.06	0.24	0.01	0.20	0.36	0.14	0.12	0.12	0.07	0.09	0.09	0.11			
Crit Moves:	****				****			****			****				
Green Time:	7.0	22.6	33.0	18.4	34.1	45.6	11.6	11.6	11.6	10.4	10.4	10.4			
Volume/Cap:	0.66	0.80	0.03	0.80	0.80	0.23	0.80	0.80	0.47	0.68	0.68	0.80			
Delay/Veh:	42.5	28.4	11.9	37.1	20.3	6.8	38.7	38.7	30.2	34.4	34.4	48.2			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	42.5	28.4	11.9	37.1	20.3	6.8	38.7	38.7	30.2	34.4	34.4	48.2			
DesignQueue:	4	29	0	11	35	4	9	7	5	1	12	7			

No Project LOS Calculations

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #1: Bayshore Blvd and Oyster Point Blvd

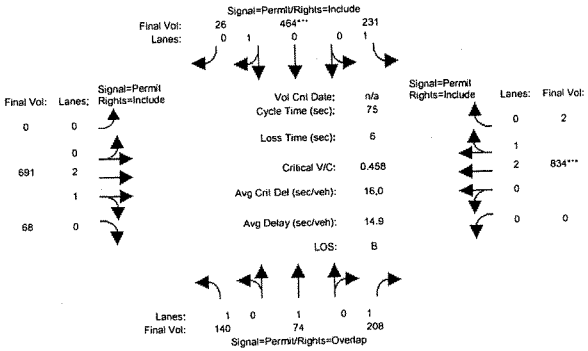


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	47	284	197	288	688	452	258	387	33	175	1009	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	284	197	288	688	452	258	387	33	175	1009	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	284	197	288	688	452	258	387	33	175	1009	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	47	284	197	288	688	452	258	387	33	175	1009	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	284	197	288	688	452	258	387	33	175	1009	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	47	284	197	288	688	452	258	387	33	175	1009	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.76	0.24	2.00	1.73	0.27
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5159	440	3150	3215	484
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.06	0.09	0.18	0.26	0.15	0.08	0.08	0.06	0.31	0.31
Crit Moves:	****				****		****				****	
Green Time:	7.0	15.0	33.0	9.2	17.2	31.2	14.0	25.8	25.8	18.0	29.8	29.8
Volume/Cap:	0.31	0.80	0.15	0.80	0.84	0.66	0.84	0.23	0.23	0.25	0.84	0.84
Delay/Veh:	35.4	42.9	14.8	46.2	38.0	22.5	50.5	19.9	19.9	25.6	27.8	27.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	42.9	14.8	46.2	38.0	22.5	50.5	19.9	19.9	25.6	27.8	27.8
DesignQueue:	2	11	5	12	25	13	10	12	1	6	31	5

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #2: Alemany Blvd and Congdon St

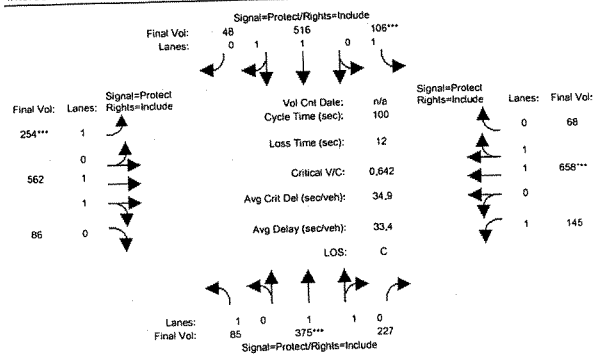


Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	140	74	208	231	464	26	0	691	68	0	834	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	74	208	231	464	26	0	691	68	0	834	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	74	208	231	464	26	0	691	68	0	834	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	74	208	231	464	26	0	691	68	0	834	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	74	208	231	464	26	0	691	68	0	834	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	74	208	231	464	26	0	691	68	0	834	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.99	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.95	0.05	0.00	2.72	0.28	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1704	96	0	5098	502	0	5587	13
Capacity Analysis Module:												
Vol/Sat:	0.08	0.04	0.12	0.13	0.27	0.27	0.00	0.14	0.14	0.00	0.15	0.15
Crit Moves:					****						****	
Green Time:	44.6	44.6	44.6	44.6	44.6	44.6	0.0	24.4	24.4	0.0	24.4	24.4
Volume/Cap:	0.13	0.07	0.20	0.22	0.46	0.46	0.00	0.42	0.42	0.00	0.46	0.46
Delay/Veh:	6.8	6.5	7.1	7.2	8.8	8.8	0.0	19.9	19.9	0.0	20.2	20.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.8	6.5	7.1	7.2	8.8	8.8	0.0	19.9	19.9	0.0	20.2	20.2
DesignQueue:	2	1	4	4	8	0	0	20	2	0	24	0

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #3: Alemany Blvd and Geneva Ave

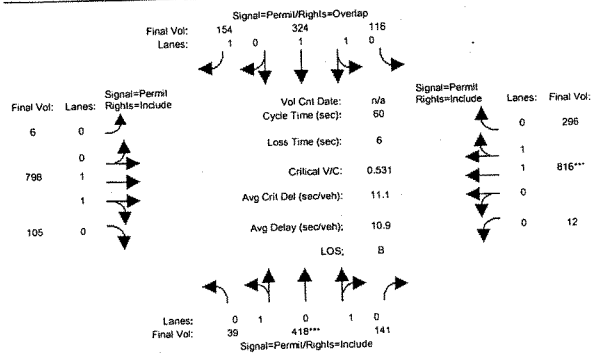


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	85	375	227	106	516	48	254	562	86	145	658	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	375	227	106	516	48	254	562	86	145	658	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	375	227	106	516	48	254	562	86	145	658	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	375	227	106	516	48	254	562	86	145	658	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	375	227	106	516	48	254	562	86	145	658	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	85	375	227	106	516	48	254	562	86	145	658	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.23	0.77	1.00	1.83	0.17	1.00	1.73	0.27	1.00	1.81	0.19
Final Sat.:	1750	2304	1395	1750	3385	315	1750	3209	491	1750	3353	347
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.06	0.15	0.15	0.15	0.18	0.18	0.08	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	11.0	25.4	25.4	9.4	23.9	23.9	22.6	36.1	36.1	17.1	30.6	30.6
Volume/Cap:	0.44	0.64	0.64	0.64	0.64	0.64	0.64	0.49	0.49	0.49	0.64	0.64
Delay/Veh:	43.3	34.8	34.8	51.9	35.8	35.8	38.6	25.0	25.0	38.7	31.2	31.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	34.8	34.8	51.9	35.8	35.8	38.6	25.0	25.0	38.7	31.2	31.2
DesignQueue:	4	16	10	5	23	2	11	21	3	7	27	3

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #4: Mission St and Geneva Ave

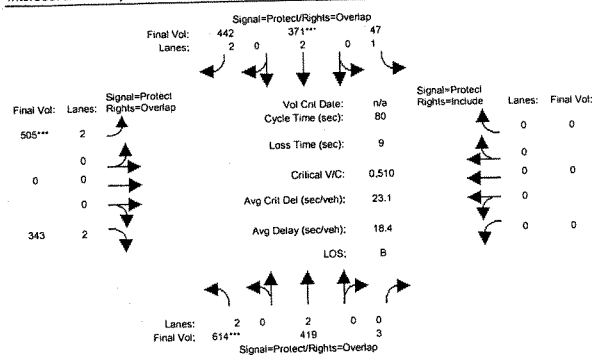


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	39	418	141	116	324	154	6	798	105	12	816	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	418	141	116	324	154	6	798	105	12	816	296
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	418	141	116	324	154	6	798	105	12	816	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	418	141	116	324	154	6	798	105	12	816	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	418	141	116	324	154	6	798	105	12	816	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	39	418	141	116	324	154	6	798	105	12	816	296
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.13	1.40	0.47	0.54	1.46	1.00	0.01	1.76	0.23	0.02	1.45	0.53
Final Sat.:	235	2516	849	975	2724	1750	24	3160	416	38	2614	948
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.12	0.12	0.09	0.25	0.25	0.25	0.31	0.31	0.31
Crit Moves:		****									****	
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	35.2	35.2	35.2	35.2	35.2	35.2
Volume/Cap:	0.53	0.53	0.53	0.38	0.38	0.28	0.43	0.43	0.43	0.53	0.53	0.53
Delay/Veh:	17.5	17.5	17.5	16.3	16.3	15.8	7.0	7.0	7.0	7.7	7.7	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.5	17.5	17.5	16.3	16.3	15.8	7.0	7.0	7.0	7.7	7.7	7.7
DesignQueue:	1	10	3	3	8	4	0	12	2	0	12	4

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #5: Bayshore Blvd and Geneva Ave

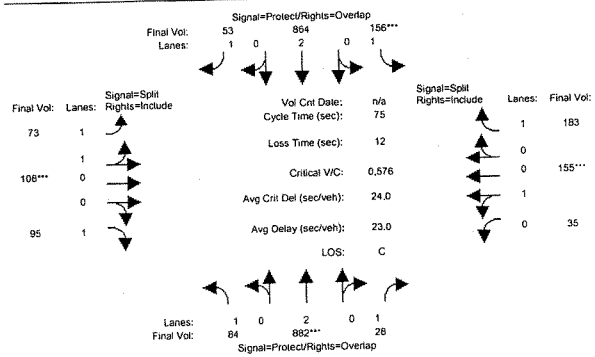


Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	614	419	3	47	371	442	505	0	343	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	614	419	3	47	371	442	505	0	343	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	614	419	3	47	371	442	505	0	343	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	614	419	3	47	371	442	505	0	343	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	614	419	3	47	371	442	505	0	343	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	614	419	3	47	371	442	505	0	343	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.97	0.95	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	1.99	0.01	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3674	26	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.11	0.11	0.03	0.10	0.14	0.16	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	30.6	27.0	27.0	18.9	15.3	40.4	25.1	0.0	55.7	0.0	0.0	0.0
Volume/Cap:	0.51	0.34	0.34	0.11	0.51	0.28	0.51	0.00	0.16	0.00	0.00	0.00
Delay/Veh:	19.3	20.0	20.0	24.1	29.6	11.5	22.9	0.0	4.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.3	20.0	20.0	24.1	29.6	11.5	22.9	0.0	4.2	0.0	0.0	0.0
DesignQueue:	18	13	0	2	14	10	16	0	5	0	0	0

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project PM

Intersection #6: Bayshore Blvd and Old County Rd

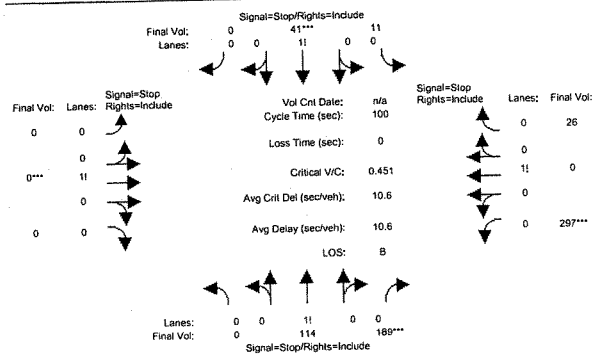


Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	84	882	28	156	864	53	73	108	95	35	155	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	882	28	156	864	53	73	108	95	35	155	183
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	882	28	156	864	53	73	108	95	35	155	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	882	28	156	864	53	73	108	95	35	155	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	882	28	156	864	53	73	108	95	35	155	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	84	882	28	156	864	53	73	108	95	35	155	183
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.18	0.82	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	332	1468	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.02	0.09	0.23	0.03	0.04	0.06	0.05	0.11	0.11	0.10
Crit Moves:		****		****				****			****	
Green Time:	11.6	28.8	41.9	11.1	28.3	38.3	10.0	10.0	10.0	13.1	13.1	13.1
Volume/Cap:	0.31	0.60	0.03	0.60	0.60	0.06	0.31	0.43	0.41	0.60	0.60	0.60
Delay/Veh:	28.8	19.2	7.4	33.9	19.6	9.3	29.7	30.6	30.9	31.9	31.9	31.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.8	19.2	7.4	33.9	19.6	9.3	29.7	30.6	30.9	31.9	31.9	31.8
DesignQueue:	3	24	1	6	24	1	3	4	3	1	5	6

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #7: Tunnel Ave and Lagoon Wy

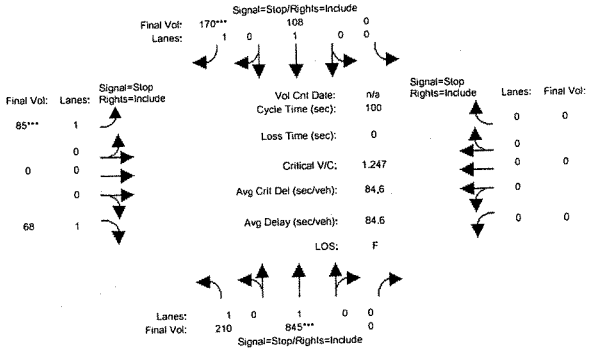


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	114	189	11	41	0	0	0	0	297	0	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	114	189	11	41	0	0	0	0	297	0	26
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	114	189	11	41	0	0	0	0	297	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	114	189	11	41	0	0	0	0	297	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	114	189	11	41	0	0	0	0	297	0	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	114	189	11	41	0	0	0	0	297	0	26
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.38	0.62	0.21	0.79	0.00	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	0	294	488	140	521	0	0	645	0	659	0	58
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.39	0.39	0.08	0.08	xxxx	xxxx	0.00	xxxx	0.45	xxxx	0.45
Crit Moves:			****		****			****		****		
Delay/Veh:	0.0	10.0	10.0	8.5	8.5	0.0	0.0	0.0	0.0	11.5	0.0	11.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	10.0	10.0	8.5	8.5	0.0	0.0	0.0	0.0	11.5	0.0	11.5
LOS by Move:	*	A	A	A	A	*	*	*	*	B	*	B
ApproachDel:		10.0			8.5			xxxxxx			11.5	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		10.0			8.5			xxxxxx			11.5	
LOS by Appr:		A			A			*			B	

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

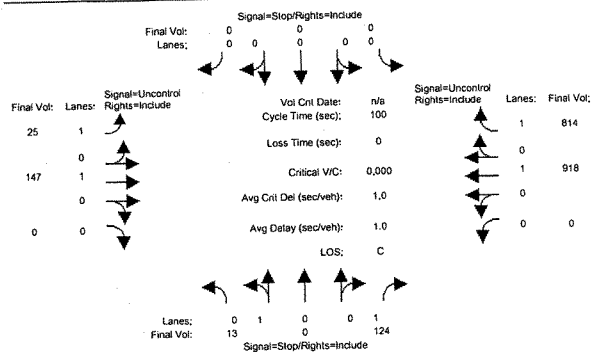


Street Name:	Sierra Point Parkway						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	210	845	0	0	108	170	85	0	68	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	845	0	0	108	170	85	0	68	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	210	845	0	0	108	170	85	0	68	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	845	0	0	108	170	85	0	68	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	845	0	0	108	170	85	0	68	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	210	845	0	0	108	170	85	0	68	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	612	678	0	0	593	672	477	0	565	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.34	1.25	xxxx	xxxx	0.18	0.25	0.18	xxxx	0.12	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	11.4	141	0.0	0.0	10.0	9.7	11.7	0.0	9.7	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.4	141	0.0	0.0	10.0	9.7	11.7	0.0	9.7	0.0	0.0	0.0
LOS by Move:	B	F	*	*	A	A	B	*	A	*	*	*
ApproachDel:		115.1			9.8			10.8			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		115.1			9.8			10.8			xxxxxx	
LOS by Appr:		F			A			B			*	

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project PM

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Volume Module:												
Base Vol:	13	0	124	0	0	0	25	147	0	0	918	814
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	0	124	0	0	0	25	147	0	0	918	814
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	0	124	0	0	0	25	147	0	0	918	814
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	0	124	0	0	0	25	147	0	0	918	814
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	13	0	124	0	0	0	25	147	0	0	918	814
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1522	xxxx	147	xxxx	xxxx	xxxxx	1732	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	132	xxxx	905	xxxx	xxxx	xxxxx	369	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	125	xxxx	905	xxxx	xxxx	xxxxx	369	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	0.14	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	0.5	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	9.6	xxxxx	xxxx	xxxxx	15.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	C	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	125	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	37.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	E	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		12.2			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		B			*			*			*	

Peak Hour Delay Signal Warrant Report

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1 0	0 1	0	0 0	0 0	1	0 1	0 0	0	0 1	0 1
Final Vol.:	13	0	124	0	0	0	25	147	0	0	918	814
ApproachDel:	12.2			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound] [lanes=2] [control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.5]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=137]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3] [total volume=2041]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant NOT Met

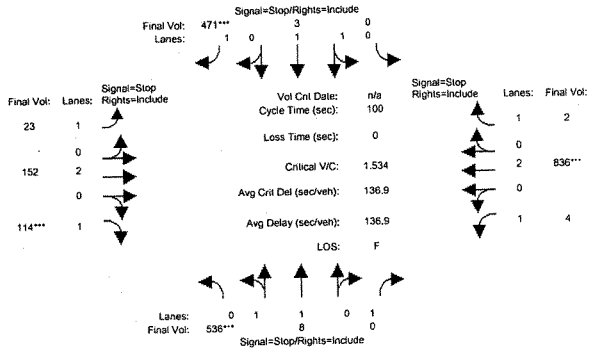
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	1 0	0 1	0	0 0	0 0	1	0 1	0 0	0	0 1	0 1
Final Vol.:	13	0	124	0	0	0	25	147	0	0	918	814

Major Street Volume: 1904
Minor Approach Volume: 137
Minor Approach Volume Threshold: 97 [less than minimum of 150]

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project PM

Intersection #10: Sierra Point Pkwy and Shoreline Ct

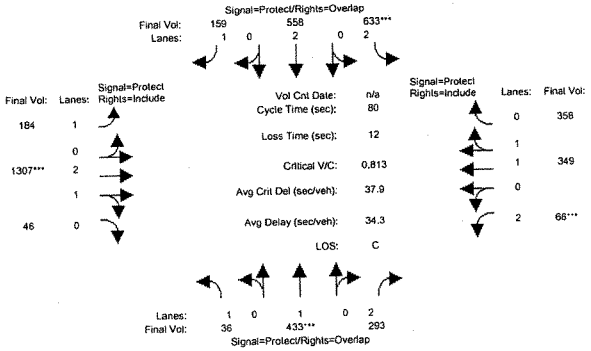


Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	536	8	0	0	3	471	23	152	114	4	836	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	536	8	0	0	3	471	23	152	114	4	836	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	536	8	0	0	3	471	23	152	114	4	836	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	536	8	0	0	3	471	23	152	114	4	836	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	536	8	0	0	3	471	23	152	114	4	836	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	536	8	0	0	3	471	23	152	114	4	836	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	349	366	394	0	731	395	327	685	367	376	797	430
Capacity Analysis Module:												
Vol/Sat:	1.53	0.02	0.00	xxxx	0.00	1.19	0.07	0.22	0.31	0.01	1.05	0.00
Crit Moves:	****					****			****		****	
Delay/Veh:	280.0	12.7	0.0	0.0	12.6	137.4	14.5	16.2	16.9	12.3	89.1	11.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	280.0	12.7	0.0	0.0	12.6	137.4	14.5	16.2	16.9	12.3	89.1	11.1
LOS by Move:	F	B	*	*	B	F	B	C	C	B	F	B
ApproachDel:	276.0			136.6			16.3			88.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	276.0			136.6			16.3			88.6		
LOS by Appr:	F			F			C			F		

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #1: Bayshore Blvd and Oyster Point Blvd

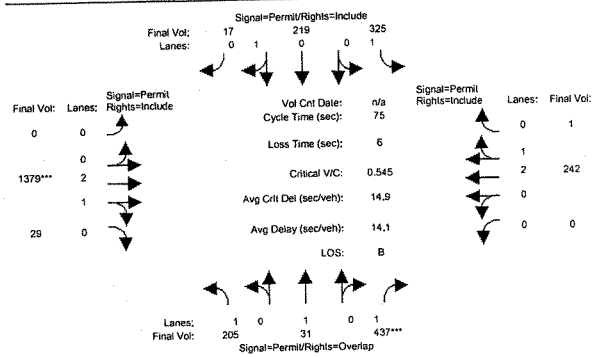


Street Name:	Bayshore Blvd/Sister Cities Blvd						Oyster Point Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	36	433	293	633	558	159	184	1307	46	66	349	358
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	433	293	633	558	159	184	1307	46	66	349	358
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	433	293	633	558	159	184	1307	46	66	349	358
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	433	293	633	558	159	184	1307	46	66	349	358
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	433	293	633	558	159	184	1307	46	66	349	358
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	433	293	633	558	159	184	1307	46	66	349	358
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.83	1.00	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	1.00	1.00	2.00	2.00	2.00	1.00	1.00	2.89	0.11	2.00	1.00	1.00
Final Sat.:	1750	1900	3150	3150	3800	1750	1750	5409	190	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.09	0.20	0.15	0.09	0.11	0.24	0.24	0.02	0.18	0.20
Crit Moves:		****		****				****		****		
Green Time:	14.6	20.7	27.7	18.3	24.4	34.3	9.8	22.0	22.0	7.0	19.1	19.1
Volume/Cap:	0.11	0.88	0.27	0.88	0.48	0.21	0.85	0.88	0.88	0.24	0.77	0.85
Delay/Veh:	27.5	44.9	19.0	41.8	22.9	14.5	61.2	33.9	33.9	34.5	32.3	37.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.5	44.9	19.0	41.8	22.9	14.5	61.2	33.9	33.9	34.5	32.3	37.8
DesignQueue:	1	15	9	23	18	4	7	45	2	3	12	13

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #2: Alemany Blvd and Congdon St

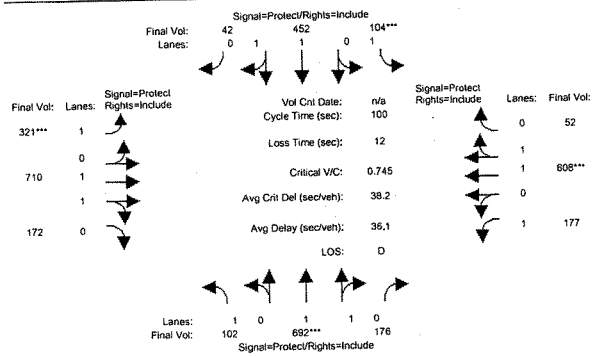


Street Name:	Congdon Street						Alemany Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	205	31	437	325	219	17	0	1379	29	0	242	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	205	31	437	325	219	17	0	1379	29	0	242	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	205	31	437	325	219	17	0	1379	29	0	242	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	205	31	437	325	219	17	0	1379	29	0	242	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	205	31	437	325	219	17	0	1379	29	0	242	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	205	31	437	325	219	17	0	1379	29	0	242	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	0.93	0.07	0.00	2.94	0.06	0.00	2.99	0.01
Final Sat.:	1750	1900	1750	1750	1670	130	0	5485	115	0	5577	23
Capacity Analysis Module:												
Vol/Sat:	0.12	0.02	0.25	0.19	0.13	0.13	0.00	0.25	0.25	0.00	0.04	0.04
Crit Moves:			****					****				
Green Time:	34.4	34.4	34.4	34.4	34.4	34.4	0.0	34.6	34.6	0.0	34.6	34.6
Volume/Cap:	0.26	0.04	0.54	0.41	0.29	0.29	0.00	0.54	0.54	0.00	0.09	0.09
Delay/Veh:	12.6	11.2	15.4	13.8	12.9	12.9	0.0	14.8	14.8	0.0	11.4	11.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.6	11.2	15.4	13.8	12.9	12.9	0.0	14.8	14.8	0.0	11.4	11.4
DesignQueue:	5	1	10	8	5	0	0	33	1	0	5	0

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #3: Alemany Blvd and Geneva Ave

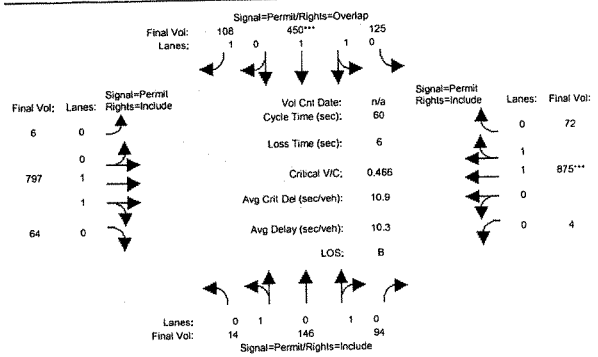


Street Name:	Alemany Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	102	692	176	104	452	42	321	710	172	177	608	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	692	176	104	452	42	321	710	172	177	608	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	692	176	104	452	42	321	710	172	177	608	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	692	176	104	452	42	321	710	172	177	608	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	692	176	104	452	42	321	710	172	177	608	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	102	692	176	104	452	42	321	710	172	177	608	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.58	0.42	1.00	1.83	0.17	1.00	1.60	0.40	1.00	1.84	0.16
Final Sat.:	1750	2949	750	1750	3385	315	1750	2978	721	1750	3408	291
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.06	0.13	0.13	0.18	0.24	0.24	0.10	0.18	0.18
Crit Moves:		****			****			****			****	
Green Time:	13.6	31.5	31.5	8.0	25.9	25.9	24.6	34.1	34.1	14.5	23.9	23.9
Volume/Cap:	0.43	0.75	0.75	0.75	0.52	0.52	0.75	0.70	0.70	0.70	0.75	0.75
Delay/Veh:	40.9	33.3	33.3	64.5	32.2	32.2	41.8	30.3	30.3	49.1	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.9	33.3	33.3	64.5	32.2	32.2	41.8	30.3	30.3	49.1	38.7	38.7
DesignQueue:	5	28	7	5	19	2	14	28	7	9	27	2

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #4: Mission St and Geneva Ave

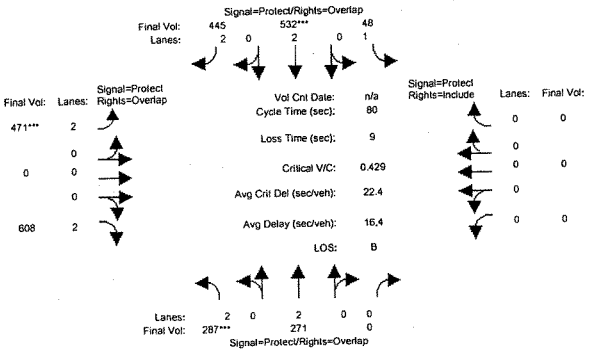


Street Name:	Mission St						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	14	146	94	125	450	108	6	797	64	4	875	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	146	94	125	450	108	6	797	64	4	875	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	146	94	125	450	108	6	797	64	4	875	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	146	94	125	450	108	6	797	64	4	875	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	146	94	125	450	108	6	797	64	4	875	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	14	146	94	125	450	108	6	797	64	4	875	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	0.11	1.15	0.74	0.45	1.55	1.00	0.01	1.84	0.15	0.01	1.84	0.15
Final Sat.:	198	2069	1332	804	2895	1750	25	3309	266	15	3312	273
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.16	0.16	0.06	0.24	0.24	0.24	0.26	0.26	0.26
Crit Moves:					****						****	
Green Time:	20.0	20.0	20.0	20.0	20.0	20.0	34.0	34.0	34.0	34.0	34.0	34.0
Volume/Cap:	0.21	0.21	0.21	0.47	0.47	0.19	0.43	0.43	0.43	0.47	0.47	0.47
Delay/Veh:	14.4	14.4	14.4	16.1	16.1	14.4	7.6	7.6	7.6	7.8	7.8	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.4	14.4	14.4	16.1	16.1	14.4	7.6	7.6	7.6	7.8	7.8	7.8
DesignQueue:	0	3	2	3	10	2	0	12	1	0	14	1

Sierra Point Biotech
No Project

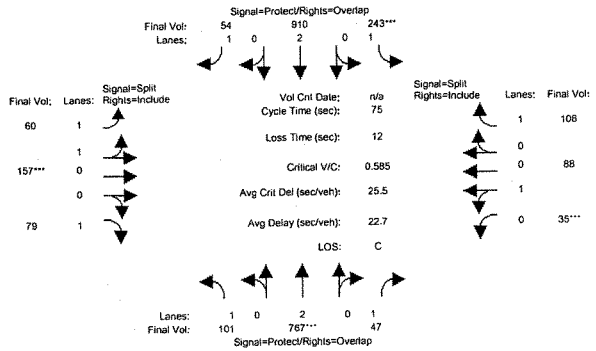
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Project AM

Intersection #5: Bayshore Blvd and Geneva Ave



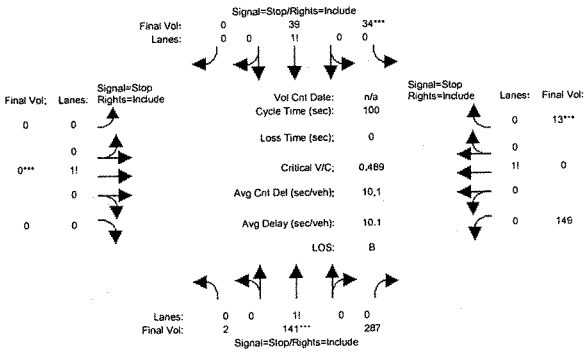
Street Name:	Bayshore Blvd						Geneva Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	0	0	0
Volume Module:												
Base Vol:	287	271	0	48	532	445	471	0	608	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	287	271	0	48	532	445	471	0	608	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	287	271	0	48	532	445	471	0	608	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	287	271	0	48	532	445	471	0	608	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	271	0	48	532	445	471	0	608	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	287	271	0	48	532	445	471	0	608	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.83	0.92	1.00	0.92
Lanes:	2.00	2.00	0.00	1.00	2.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3150	3800	0	1750	3800	3150	3150	0	3150	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.07	0.00	0.03	0.14	0.14	0.15	0.00	0.19	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	17.0	25.4	0.0	17.8	26.1	54.0	27.9	0.0	44.9	0.0	0.0	0.0
Volume/Cap:	0.43	0.22	0.00	0.12	0.43	0.21	0.43	0.00	0.34	0.00	0.00	0.00
Delay/Veh:	27.7	20.2	0.0	25.0	21.3	5.0	20.2	0.0	9.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	20.2	0.0	25.0	21.3	5.0	20.2	0.0	9.7	0.0	0.0	0.0
DesignQueue:	10	8	0	2	17	7	14	0	12	0	0	0

Intersection #6: Bayshore Blvd and Old County Rd



Street Name:	Bayshore Blvd						Old County Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module:												
Base Vol:	101	767	47	243	910	54	60	157	79	35	88	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	767	47	243	910	54	60	157	79	35	88	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	767	47	243	910	54	60	157	79	35	88	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	767	47	243	910	54	60	157	79	35	88	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	767	47	243	910	54	60	157	79	35	88	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	101	767	47	243	910	54	60	157	79	35	88	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	0.28	0.72	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	512	1288	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.03	0.14	0.24	0.03	0.03	0.08	0.05	0.07	0.07	0.06
Crit Moves:		****		****				****		****		
Green Time:	12.0	25.3	35.3	17.4	30.7	41.0	10.3	10.3	10.3	10.0	10.0	10.0
Volume/Cap:	0.36	0.60	0.06	0.60	0.59	0.06	0.25	0.60	0.33	0.51	0.51	0.46
Delay/Veh:	28.9	21.4	10.8	28.2	17.8	8.0	29.0	33.1	30.0	32.1	32.1	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.9	21.4	10.8	28.2	17.8	8.0	29.0	33.1	30.0	32.1	32.1	31.5
DesignQueue:	4	22	1	8	24	1	2	6	3	1	3	4

Intersection #7: Tunnel Ave and Lagoon Wy

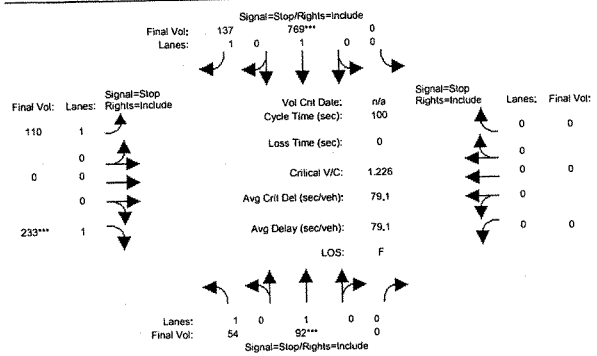


Street Name:	Tunnel Avenue						Lagoon Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	2	141	287	34	39	0	0	0	0	149	0	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	141	287	34	39	0	0	0	0	149	0	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	141	287	34	39	0	0	0	0	149	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	141	287	34	39	0	0	0	0	149	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	141	287	34	39	0	0	0	0	149	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	2	141	287	34	39	0	0	0	0	149	0	13
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.33	0.66	0.47	0.53	0.00	0.00	1.00	0.00	0.92	0.00	0.08
Final Sat.:	4	288	586	331	380	0	0	628	0	610	0	53
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.49	0.10	0.10	xxxx	xxxx	0.00	xxxx	0.24	xxxx	0.24
Crit Moves:		****		****				****				****
Delay/Veh:	10.6	10.6	10.6	8.3	8.3	0.0	0.0	0.0	0.0	9.6	0.0	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.6	10.6	10.6	8.3	8.3	0.0	0.0	0.0	0.0	9.6	0.0	9.6
LOS by Move:	B	B	B	A	A	*	*	*	*	A	*	A
ApproachDel:		10.6			8.3			xxxxxx			9.6	
Delay Adj:		1.00			1.00			xxxxx			1.00	
ApprAdjDel:		10.6			8.3			xxxxxx			9.6	
LOS by Appr:		B			A			*			A	

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project AM

Intersection #8: Sierra Point Pkwy and Lagoon Wy

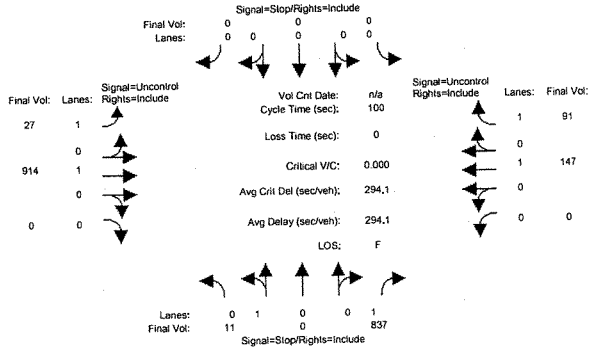


Street Name:	Sierra Point Parkway								Lagoon Way			
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	54	92	0	0	769	137	110	0	233	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	92	0	0	769	137	110	0	233	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	92	0	0	769	137	110	0	233	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	92	0	0	769	137	110	0	233	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	92	0	0	769	137	110	0	233	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	54	92	0	0	769	137	110	0	233	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	509	548	0	0	627	701	497	0	594	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	xxxx	xxxx	1.23	0.20	0.22	xxxx	0.39	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	10.4	10.4	0.0	0.0	134	8.9	11.9	0.0	12.4	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.4	10.4	0.0	0.0	134	8.9	11.9	0.0	12.4	0.0	0.0	0.0
LOS by Move:	B	B	*	*	F	A	B	*	B	*	*	*
ApproachDel:		10.4			115.5			12.3			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		10.4			115.5			12.3			xxxxxx	
LOS by Appr:		B			F			B			*	

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Project AM

Intersection #9: Sierra Point Pkwy and US 101 NB



Street Name:	US 101 NB ramps						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	11	0	837	0	0	0	27	914	0	0	147	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	837	0	0	0	27	914	0	0	147	91
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	837	0	0	0	27	914	0	0	147	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	837	0	0	0	27	914	0	0	147	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	11	0	837	0	0	0	27	914	0	0	147	91
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1161	xxxx	914	xxxx	xxxx	xxxxx	238	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	218	xxxx	334	xxxx	xxxx	xxxxx	1341	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	215	xxxx	334	xxxx	xxxx	xxxxx	1341	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	xxxx	2.51	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	67.5	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	711.7	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	F	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	215	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	22.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	C	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	702.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound

Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 0 1	0 0 0 0 0	1 0 1 0 0	0 0 1 0 1
Final Vol.:	11 0 837	0 0 0	27 914 0	0 147 91
ApproachDel:	702.8	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=165.5]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=848]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2027]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #9 Sierra Point Pkwy and US 101 NB

****

Future Volume Alternative: Peak Hour Warrant Met

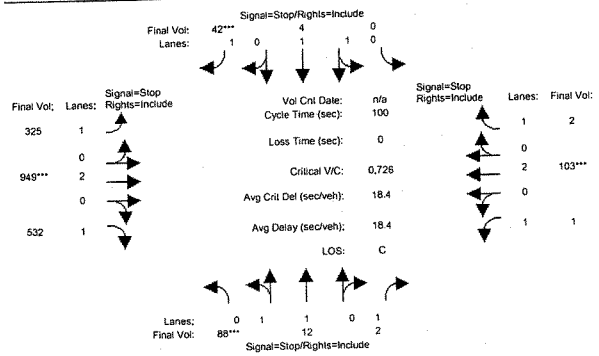
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 1 0 0 1	0 0 0 0 0	1 0 1 0 0	0 0 1 0 1
Final Vol.:	11 0 837	0 0 0	27 914 0	0 147 91

Major Street Volume: 1179
Minor Approach Volume: 848
Minor Approach Volume Threshold: 303

Sierra Point Biotech
No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Project AM

Intersection #10: Sierra Point Pkwy and Shoreline Ct



Street Name:	Shoreline Court						Sierra Point Parkway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	88	12	2	0	4	42	325	949	532	1	103	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	12	2	0	4	42	325	949	532	1	103	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	12	2	0	4	42	325	949	532	1	103	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	12	2	0	4	42	325	949	532	1	103	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	12	2	0	4	42	325	949	532	1	103	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	88	12	2	0	4	42	325	949	532	1	103	2
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	379	395	427	0	740	401	597	1307	747	389	828	447
Capacity Analysis Module:												
Vol/Sat:	0.23	0.03	0.00	xxxx	0.01	0.10	0.54	0.73	0.71	0.00	0.12	0.00
Crit Moves:	****					****		****			****	
Delay/Veh:	13.5	11.0	10.1	0.0	11.1	11.1	15.5	21.2	18.2	11.1	11.5	9.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.5	11.0	10.1	0.0	11.1	11.1	15.5	21.2	18.2	11.1	11.5	9.9
LOS by Move:	B	B	B	*	B	B	C	C	C	B	B	A
ApproachDel:		13.2			11.1			19.3			11.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.2			11.1			19.3			11.5	
LOS by Appr:		B			B			C			B	

Appendix C-9

Fehr & Peers Updated Sierra Point Phasing Analysis

FEHR & PEERS ASSOCIATES, INC.
Transportation Consultants

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www.fehrandpeers.com

October 10, 2001

Mr. Troy Smothers
OPUS West
6160 Stoneridge Mall Rd.
Suite 360
Pleasanton, CA 94588

Re: Updated Sierra Point Phasing Analysis ***1015-403***

Dear Mr. Smothers:

Fehr & Peers Associates, Inc. has updated the phasing analysis for the proposed development at Sierra Point located in the Cities of South San Francisco and Brisbane. The original phasing analysis was prepared to identify when future intersection improvements would be required based on traffic volumes on Sierra Point Parkway. This update is based on new traffic counts conducted in August 2001 and occupancy levels of existing buildings. This letter summarizes our key findings and conclusions.

Background

In spring 2000, Fehr & Peers prepared a phasing analysis that identified a series of intersection improvements required to provide acceptable operations at three locations on Sierra Point Parkway: 1) Shoreline Court/Marina Boulevard, 2) the U.S. 101 Northbound Ramps, and 3) Lagoon Way. The phasing analysis was prepared based on a proposed development phasing plan submitted by OPUS, but could be used to assess the impacts of any development scheme. The analysis was presented in an April 24, 2000 memorandum from Sohrab Rashid to Randy Ackerman.

Table 4 of that document identified specific peak hour traffic volume thresholds on Sierra Point Parkway that, once exceeded, would require signalization and lane additions at each intersection. The trips associated with each new use would be added to the existing traffic volume to determine if the threshold was exceeded. Trips for each use were estimated using standard rates published in *Trip Generation* (Sixth Edition) published by the Institute of Transportation Engineers (ITE).

Comparison of Expected vs. Actual Traffic Volumes

The pattern of development has evolved differently in the Sierra Point area over the last 18 months. In addition, some buildings are only partially occupied and overall traffic does not appear to be as high as projected by the ITE rates.

To update the phasing analysis, a new traffic count was obtained in August 2001 and first compared to the calculation method described in the April 2000 analysis. In the attached Table 1, the expected traffic volume is calculated based on the original 1998 existing volumes plus traffic from new buildings constructed since then. Traffic from currently underutilized buildings (i.e., that were essentially fully occupied in 1998/1999) is subtracted from the counts. This is the method described in the April 2000 analysis.

The resulting volumes that are estimated based on the original count and new construction are 981 AM peak hour trips and 821 PM peak hour trips. The August 2001 count based on an average of three days worth of data shows that the current volumes on Sierra Point Parkway west of Shoreline Court are 817 AM peak hour trips and 599 PM peak hour trips. Thus, the number of trips currently being generated by occupied uses in Sierra Point is less than the level projected using ITE trip rates.

Updated Phasing Analysis

Since the measured or actual level of traffic is currently less than projected, the phasing analysis was updated based on the new (August 2001) traffic count to determine which improvements would be required if all existing buildings and those under construction are fully occupied. This analysis is summarized in Table 2 (attached).

According to the results of Table 2, all existing and approved buildings at Sierra Point would generate a total of 1,496 trips and 1,274 trips in the AM and PM peak hours, respectively, assuming all buildings are fully occupied. Based on the volume thresholds identified in the April 24, 2000 phasing analysis and the August 2001 count, none of the ultimate improvements would be required.

For informational purposes, the phasing analysis was also updated using all of the original data from the April 2000 study. The results of this analysis are presented in Table 3 and show that ultimate improvements would be required at both the Shoreline Court/Marina Boulevard intersection and at the Lagoon Way intersection on Sierra Point Parkway. However, the analysis in Table 2 indicates that current traffic volumes do not warrant installation of these improvements at this time.

We appreciate the opportunity to help you with this project. Please call me if you have any questions regarding this analysis.

Sincerely,
FEHR & PEERS ASSOCIATES, INC.

D. Sohrab Rashid, P.E.
Senior Associate

Table 1

Comparison of Expected vs. Actual Traffic Volumes on Sierra Point Parkway

Scenario	Parcel	Use	Size	% Occ.	Estimated Trips AM Trips	Estimated Trips PM Trips	Number of Trips AM Pk Hr	Number of Trips PM Pk Hr
1998 "Existing" Count	N/A	N/A	N/A	N/A	N/A	N/A	520	385
Underutilized Bldgs								
Hitachi Existing		Office	200,000	76%	324	303	-78	-73
Good Guys/Walmart Existing		Office	100,000	81%	186	191	-35	-36
Spieker Existing		Office	100,000	80%	186	191	-37	-38
Revised Existing (Estimated without 8-Story constructed in early 2000.)							370	238
New Buildings								
Hotel 1A		Hotel	220	100%	125	125	125	125
8-Story		Office	194,000	65%	316	296	205	192
Carlyle 10D		Office	136,000	50%	187	177	94	89
MJ 10C		Office	136,000	100%	187	177	187	177
10B		Office	136,000	0%	187	177	0	0
10A		Office	68,000	0%	138	159	0	0
Foster II/Walmart		Office	63,000	0%	128	147	0	0
				Subtotal of New Buildings			611	583
Expected Traffic Volumes (New Buildings + Revised Existing)							981	821
Actual Counts (August 2001) (Average based on data collected August 21-23, 2001)							817	599
						Difference	-164	-222

Conclusion: The number of trips being generated by Sierra Point developments is less than projected.

Table 2

Improvement Needs Based on New August 2001 Counts (Actual)

What happens if all existing buildings and those under construction are fully occupied?

	AM Pk	PM Pk
Full Occupancy of Hitachi, Good Guys, Spieker	150	147
Full Occupancy of 8-Story	111	104
Full occupancy of 10A, 10B and 10D	419	425
plus Actual Count (August 2001)	817	599
Yields	1,496	1,274

Are the ultimate improvements if all existing buildings and those under construction are occupied? :

	Volume Threshold AM Pk	Volume Threshold PM Pk	Projected Volume AM Pk	Projected Volume PM Pk	Improvements Req'd? Yes	Improvements Req'd? No
At Shoreline Ct/Marina Boulevard	1,680	1,460	1,496	1,274		X
At U.S 101 NB Ramps	2,200	1,970	1,496	1,274		X
At Lagoon Way	1,590	1,360	1,496	1,274		X

Table 3

Improvement Needs Based on April 2000 Phasing Analysis (Expected)

(Using original 1998 counts)

What happens if all existing buildings and those under construction are fully occupied?

	AM Pk	PM Pk
Full Occupancy of Hitachi, Good Guys, Spieker	150	147
Full Occupancy of 8-Story	111	104
Full occupancy of 10A, 10B and 10D	419	425
plus Expected Traffic Volumes	981	821
Yields	1,660	1,496

Are the ultimate improvements if all existing buildings and those under construction are occupied? :

	Volume Threshold		Projected Volume		Improvements Req'd?	
	AM Pk	PM Pk	AM Pk	PM Pk	Yes	No
At Shoreline Ct/Marina Boulevard	1,680	1,460	1,660	1,496	X	
At U.S 101 NB Ramps	2,200	1,970	1,660	1,496		X
At Lagoon Way	1,590	1,360	1,660	1,496	X	

FEHR & PEERS ASSOCIATES, INC.
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MEMORANDUM

To: Randy Ackerman, Opus West

From: Sohrab Rashid

Date: April 24, 2000

Subject: Sierra Point Improvement Phasing Analysis Update 985-094

Fehr & Peers Associates has completed a phasing analysis to determine the level of roadway improvements required to accommodate buildout of development at Sierra Point in the Cities of Brisbane and South San Francisco. This memorandum details the timing of improvements to three intersections on Sierra Point Parkway: at Marina Boulevard-Shoreline Court, at the U.S. Highway 101 Ramps, and at Lagoon Way. The phasing of improvements is based on the incremental increases in development traffic over Existing Conditions. Due to a change in the proposed phasing of land uses, this memorandum supersedes the original analysis documented in a November 30, 1998 memorandum.

Existing Conditions

Existing peak hour and lane configurations are presented on Figures 1 and 2, respectively. Traffic movements are controlled by stop signs at each of the study intersections, all of which are located in the City of Brisbane. Level of service (LOS) was calculated for the morning (AM) and evening (PM) peak hours using the volumes and lanes as input data. Unsignalized intersections were analyzed based on the methodology presented in the *Highway Capacity Manual (HCM)* (Special Report 209, Transportation Research Board, 1994). Signalized intersections were analyzed based on the methodology described in *Circular 212: Interim Materials on Highway Capacity* (Transportation Research Board, 1980) with adjusted intersection capacities based on measured saturation flow rates on the San Francisco peninsula. All of the intersections and individual turning movements are currently operating at an acceptable level (i.e., LOS D or better) during both peak hours.

The traffic analysis presented below describes the improvement phasing plan to provide acceptable traffic operations. The phasing plan is based on monitoring traffic volumes generated by the existing and proposed uses. Since traffic from all uses at Sierra Point will travel on Sierra Point Parkway east of U.S. Highway 101, the most appropriate location to monitor traffic

volumes is on Sierra Point Parkway immediately west of the Marina Boulevard-Shoreline Court intersection. The existing two-way volumes of 520 vehicles in the AM peak hour and 385 vehicles in the PM peak hour will serve as the baseline for monitoring.

Traffic Analysis

The traffic analysis for this study assumed the development of various buildings within Sierra Point based on direction from Opus West staff. The initial study included analysis of three distinct development phases:

Phase I:	one 3-story building on Parcel 10C, one 3-story building on Parcel 10D, the 8-story building on Parcel 9, and one hotel on Parcel 1A;
Phase II:	one 3-story building on Parcel 10B; and
Phase III:	additional buildings that will trigger the need for the ultimate improvements (the amount of development under this scenario is different at each intersection).

Traffic for each of the proposed uses within Sierra Point was estimated based on rates published in *Trip Generation* (Fifth and Sixth Editions, Institute of Transportation Engineers). A summary of peak hour trip generation for all of the future uses at Sierra Point is presented in Table 1. These uses are based on the most recent conceptual *Sierra Point Master Plan* map provided by Opus West.

Traffic from each development phase was added to existing volumes and any previous phase (e.g., Phase II total volumes include existing plus Phase I and Phase II development volumes). Intersection LOS calculations were then completed to determine the level of improvements required to provide acceptable (i.e., LOS D or better) operations under each scenario. For Phase III, the LOS analysis was conducted to determine the amount of development that could be accommodated before the ultimate improvements were required. Traffic volumes at the study intersections under Phases I, II and III are shown on Figures 3, 4 and 5, respectively. The traffic analysis for each phase is described below and the corresponding LOS calculation worksheets are attached.

Phase I Analysis

Traffic volumes with Phase I developments are shown on Figure 3. Although Shoreline Court will be widened to its full cross-section south of Sierra Point Parkway under Phase I, the intersection was assumed to maintain the existing lane configurations and traffic control devices (i.e., stop signs) for purposes of this analysis. Levels of Service under Phase I were calculated for the AM and PM peak hours. Operations under Existing Conditions and with Phase I development are shown in Table 2.

Table 1
Trip Generation for Proposed Sierra Point Development

Phase/ Parcel	Use	Size	Number of Trips AM Peak Hour In	Out	Total	PM Peak Hour In	Out	Total
Phase I								
Parcel 10C	Office	140,000 sf	170	23	193	31	151	182
Parcel 1A	Hotel	220 rms.	73	52	125	61	64	125
Parcel 10D	Office	140,000 sf	170	23	193	31	151	182
Parcel 9	Office	200,000 sf	285	39	324	52	251	303
		Phase I Total	**698**	**137**	**835**	**175**	**617**	**792**
Phase II								
Parcel 10B	Office	140,000 sf	170	23	193	31	151	182
		Phase II Total	**170**	**23**	**193**	**31**	**151**	**182**
Phase III (Remaining Uses)								
Parcel 1B	Hotel	180 rms.	56	41	97	49	50	99
Parcel 10A	Hotel	150 rms.	52	37	89	45	47	92
Parcel 3	Office	395,000 sf	490	67	557	89	433	522
Parcels 5	Office	180,000 sf	217	30	247	40	194	234
Parcels 6	Office	150,000 sf	180	25	215	33	162	195
Parcels 7	Office	150,000 sf	180	25	215	33	162	195
Parcel R	Retail	20,000 sf	19	12	31	52	57	109
Parcel R	Restaurant	20,000 sf	4	4	8	50	26	76
Parcel R	Office	10,000 sf	26	4	30	6	28	34
Parcel T	Hotel	700 rms.	269	195	464	231	241	472

Notes: Hotel trips are based on number of occupied rooms (assumed to be 90 percent of rooms shown in table).
Source: Trip rates obtained from *Trip Generation* (Sixth Edition, Institute of Transportation Engineers) except for Parcel R office rates for PM peak hour, which were obtained from *Trip Generation* (Fifth Edition).

Table 2
Existing and Phase I Intersection Levels of Service

Intersection	Peak Hour	Existing LOS Overall[1]	Existing LOS Worst[2]	Phase I LOS Overall	Phase I LOS Worst
Sierra Point Pkwy./Shoreline Ct.-Marina Blvd.	AM	A	B	F	F
	PM	A	A	A	F
Sierra Point Pkwy./U.S. 101 NB Ramps	AM	A	B	A	B
	PM	A	A	A	C
Sierra Point Pkwy./Lagoon Wy.	AM	C	F	C	F
	PM	A	C	C	F

Notes: All intersections are unsignalized.
[1] Overall = Overall intersection LOS.
[2] Worst = Worst LOS for an individual turning movement.

Under Phase I, the Shoreline Court-Marina Boulevard intersection is projected to operate at LOS F during the AM peak hour with the current lane configuration. All of the movements on the west approach entering the Sierra Point area are expected to operate at LOS E or F during this peak hour. The intersection does not meet the minimum volume threshold for the Caltrans peak hour signal warrant during either peak hour. To provide acceptable operations, the following improvement is recommended:

Phase I Improvement: *Widen the west approach of Sierra Point Parkway to provide a separate right-turn lane to southbound Shoreline Court. With the planned widening of Shoreline Court, this lane will operate as a "free" movement and eastbound traffic turning right will not be required to stop.*

The Lagoon Way and U.S. Highway 101 ramps intersections on Sierra Point Parkway are projected to operate at LOS C or better during both peak hours. Although individual turning movements at the Lagoon Way intersection are projected to operate at LOS F, no improvements are recommended at this location under Phase I. Several issues regarding intersection operations should be noted. It is quite common for individual turning movements at either an unsignalized or signalized intersection to operate at LOS F, while the overall intersection operates at LOS D or better. One or more movements operating at LOS F does not necessarily indicate an overall breakdown in intersection operations. A detailed review of the LOS calculation sheets shows that some capacity would still be available for these movements under the Phase I development scenario. In addition, traffic signals would not be warranted under this scenario according to Peak Hour Volume Warrant (Warrant #11) thresholds published in the Caltrans *Traffic Manual* (see attached signal warrant analysis worksheet).

Phase II Analysis

Traffic volumes under Phase II are shown on Figure 4. These volumes include existing traffic plus traffic from both Phases I and II. The separate right-turn lane on the west approach at the Shoreline Court intersection (Phase I improvement) was assumed to be in place for this analysis. Operations at each of the study intersections were analyzed to determine if additional roadway improvements would be required under this scenario. The results of the Phase II analysis are presented in Table 3.

The Shoreline Court intersection is projected to operate at an acceptable overall intersection level of service during both peak hours; however, the northbound left-turn movement is projected to operate at LOS F during the PM peak hour. Although this movement will experience delay during the PM peak hour, a traffic signal is not warranted based on Caltrans peak hour signal warrants volume criteria. Thus, no improvements are recommended at this intersection with Phase II development.

Table 3 Phase I and II Intersection Levels of Service					
	Peak	Phase I LOS[1]		Phase II LOS	
Intersection	Hour	Overall[2]	Worst[3]	Overall	Worst
Sierra Point Pkwy./Shoreline Ct.-Marina Blvd.	AM	B	D	B	E
	PM	A	F	B	F
Sierra Point Pkwy./U.S. 101 NB Ramps	AM	A	B	B	B
	PM	A	C	C	C
Sierra Point Pkwy./Lagoon Wy.	AM	C	F	C	F
	PM	C	F	C	F

Notes: All intersections are unsignalized.
[1] Overall = Overall intersection LOS. Includes improvement at Shoreline Court intersection.
[2] Worst = Worst LOS for an individual turning movement.

The U.S. 101 northbound ramps intersection is projected to operate at acceptable levels during both peak hours and no improvements at this location are required under this scenario.

The Lagoon Way intersection is projected to operate at an overall acceptable LOS during both peak hours, but the southbound and northbound movements are expected to operate at LOS F during the AM and PM peak hours, respectively. As noted under the Phase I analysis, individual turning movements can operate at unacceptable levels while the overall intersection operates acceptably. However, the addition of any traffic to the northbound (PM) and southbound (AM) through volumes would result in excessive queuing and intolerable delays with stop sign control. Thus, this intersection could accommodate Phase II volumes without any improvements, but roadway improvements would be required prior to any additional development at Sierra Point.

Phase III Analysis

This analysis was completed to determine when ultimate improvements would be required at each of the study intersections. The level of additional development that could be accommodated at each intersection is described below.

Sierra Point Parkway/Shoreline Court-Marina Boulevard

The remaining hotel on Parcel 1B in Brisbane could be constructed under Phase III without requiring any additional improvements at the Shoreline Court intersection. However, any additional development in the Brisbane area would cause this unsignalized intersection to operate unacceptably in the AM peak hour because of significant increases in the eastbound left turn and/or the eastbound through movement volumes, which would already be relatively high. Also, the already lengthy projected delays for the northbound left-turn movement would be further exacerbated. To provide acceptable operations, the following improvement is recommended:

Phase III Improvement: *Install a traffic signal, add a second eastbound left-turn lane, and add a second northbound left-turn lane at the Sierra Point Parkway/Shoreline Court intersection. Even without the Parcel 1B hotel, traffic signals and the additional turn lanes would be required to accommodate Phase III Brisbane development.*

The addition of the second southbound right-turn lane on Marina Boulevard (part of the ultimate improvements) could be constructed separately, but it should be installed prior to occupancy of the office building(s) on Parcel 3 or the Tuntex Hotel during Phase III.

Sierra Point Parkway/U.S. 101 Northbound Ramps

Since this intersection has the fewest conflicting traffic movements, the capacity of this intersection is the highest of the three study locations. Accordingly, the Phase III development that could be accommodated before additional improvements are required includes the proposed hotel on Parcel 1B and either buildout of Parcel 3 (395,000 square feet of office) *or* two of the buildings on Parcels 5, 6, and 7 (330,000 square feet of office). Beyond this level of development, additional capacity would have to be added to provide acceptable operations.

Phase III Improvement: *Install a traffic signal and converting the existing westbound right-turn lane to a shared through/right-turn lane. The lane conversion would require construction of a second westbound departure lane that would merge into one lane before the U.S. 101 freeway overcrossing.*

Sierra Point Parkway/Lagoon Way Intersection

As noted in the Phase II analysis, the north-south through movements would be operating at unacceptable levels during either the AM or PM peak hour. Thus, the following improvement would be required prior to any additional Sierra Point development under Phase III:

Phase III Improvement: *Install traffic signals and add a second northbound through lane at the Sierra Point Parkway/Lagoon Way intersection. These improvements represent the ultimate improvement for this intersection and will provide LOS A operations during both peak hours under this scenario.*

These intersection modifications represent the ultimate improvements planned for this location.

Phasing of Improvements

Table 4 summarizes the improvement phasing for each intersection based on the projected development of uses supplied by Opus West. However, both the timing and sequence of development within Sierra Point will be dictated by market conditions. For example, the office buildings on Parcels 5, 6 and 7 may be constructed prior to any development on Parccl 9. Therefore, the improvement phasing plan should be flexible enough to accommodate different development schemes.

Table 4
Improvement Phasing Summary

Intersection	Roadway Improvement by Development Phase	Volume Threshold on Sierra Point Parkway west of Marina Bonlevard-Sboreline Court[2]
Sierra Point Pkwy./ Shoreline Ct.-Marina Bl.[1]	Construct eastbound right-turn lane *(Phase I - Interim improvement)*	AM: >1,350 and <1,680 vehicles PM: >1,170 and < 1,460vehicles
	Install a traffic signal and add a second NB left-turn lane, a second SB right-turn lane, and a second eastbound left-turn lane *(Phase III-Ultimate improvements)*	AM: >1,680 vehicles PM: >1,460 vehicles
Sierra Point Pkwy./ U.S. 101 NB Ramps	Install a traffic signal and modify WB approach to include a through and shared through/right-turn lane *(Phase III-Ultimate improvements)*	AM: >2,200 vehicles PM: >1,970 vehicles
Sierra Point Pkwy./ Lagoon Wy.	Install traffic signal and second northbound through lane *(Phase III-Ultimate improvements)*	AM: >1,590 vehicles PM: >1,360 vehicles

Notes: [1] No improvements (beyond the Phase I improvement) are required to accommodate Phase II development described in Table 1.
[2] Exceedance of either the AM or PM threshold would trigger the need for improvements.

One method of determining the need for improvements is to monitor traffic volumes at a single location. Once the total two-way traffic count at this location meets or exceeds either a specific AM or PM peak hour threshold, the corresponding improvement(s) from Table 4 would be implemented. Since traffic from all of the proposed uses will travel on Sierra Point Parkway east of U.S. Highway 101, an appropriate location would be on Sierra Point Parkway immediately west of the Marina Boulevard-Shoreline Court intersection. The peak hour volume thresholds for each improvement phase are listed in Table 4.

Based on the volume thresholds in Table 4, the addition of traffic from any combination of land uses listed in Table 1 could be used to determine the need for roadway improvements. The total

number of peak hour trips from future development can be added to the existing volumes on Sierra Point Parkway (520 in the AM peak hour and 385 in the PM peak hour). For example, the office buildings on Parcels 5, 6, and 7 plus the hotel on Parcel T (Tuntex) were assumed to be the next developments constructed at Sierra Point. Based on the volumes in Table 1 and existing traffic volumes, these uses would trigger the need for both Phase I and II improvements since they would result in 1,641 AM peak hour vehicles and 1,481 PM peak hour vehicles on Sierra Point Parkway west of Marina Boulevard-Shoreline Court. These volumes exceed the volume thresholds and would require the subsequent improvements included under Phase II. This example analysis is shown in Table 5 and could be used for any combination of uses.

Table 5
Example Calculation to Determine Timing of Roadway Improvements

	Number of Trips		
Traffic Generator	**AM Peak Hour**	**PM Peak Hour**	**Notes**
Existing	520	385	From Figure 1 (These volumes are constant)
Parcel 5, 6 & 7 Office	657	624	From Table 1
Parcel T Hotel	464	472	From Table 1
Total	**1,641**	**1,481**	These volumes exceed the thresholds for the Shoreline Court intersection (1,460 vehicles in the PM) and for the Lagoon Way intersection (1,590 in the AM and 1,360 in the PM) and would require the ultimate improvements at these locations.

Source: Fehr & Peers Associates, April 2000.

The location of each new development within Sierra Point will affect the volume of critical turning movements differently at each intersection. In addition to the traffic count monitoring described above, a signal warrant analysis should also be conducted prior to installing traffic signals at any of the study intersections. Although the warrant analysis is not the sole criteria for signal installation, it is a good indicator of the need for a traffic signal and provides additional technical support for implementing this type of improvement. This analysis will be required for the Sierra Point Parkway/U.S. Highway 101 ramps intersection because it is the ramps are under the jurisdiction of Caltrans.

Please call me if you have any questions or need any additional information.

Attachments

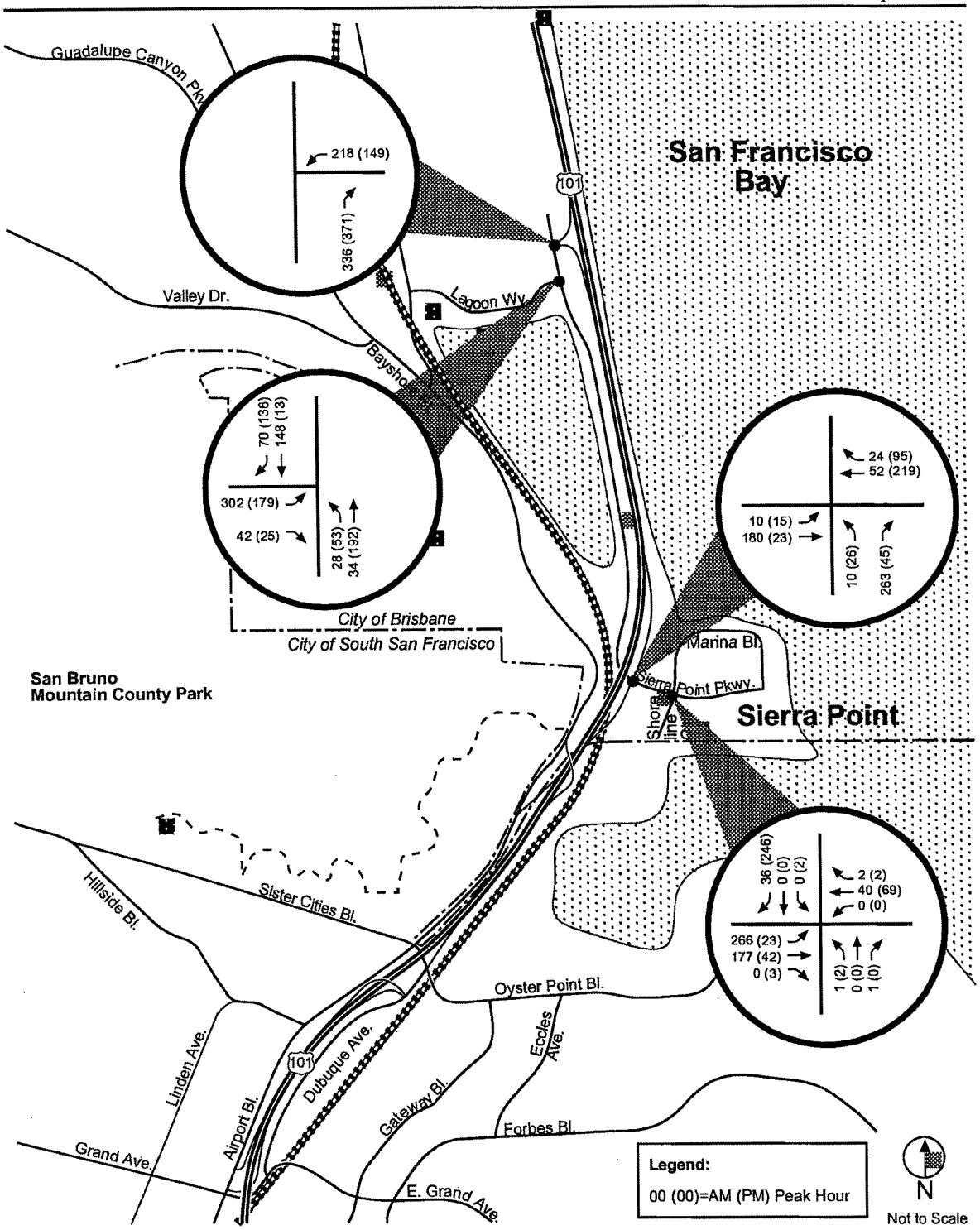

Figure 1	EXISTING PEAK HOUR TRAFFIC VOLUMES	
094-12-02		

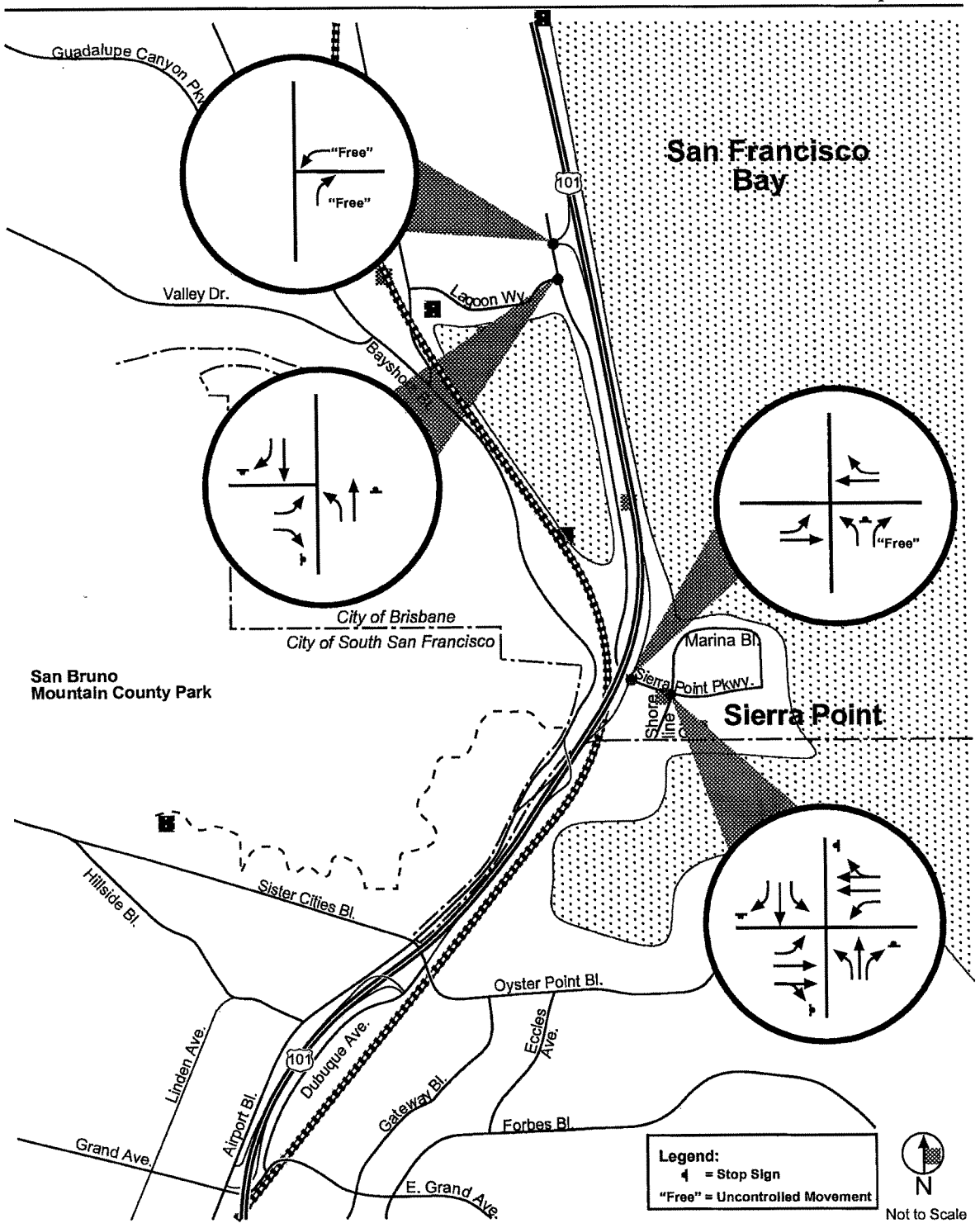

Figure 2	EXISTING INTERSECTION CONFIGURATIONS	
094-13-02		

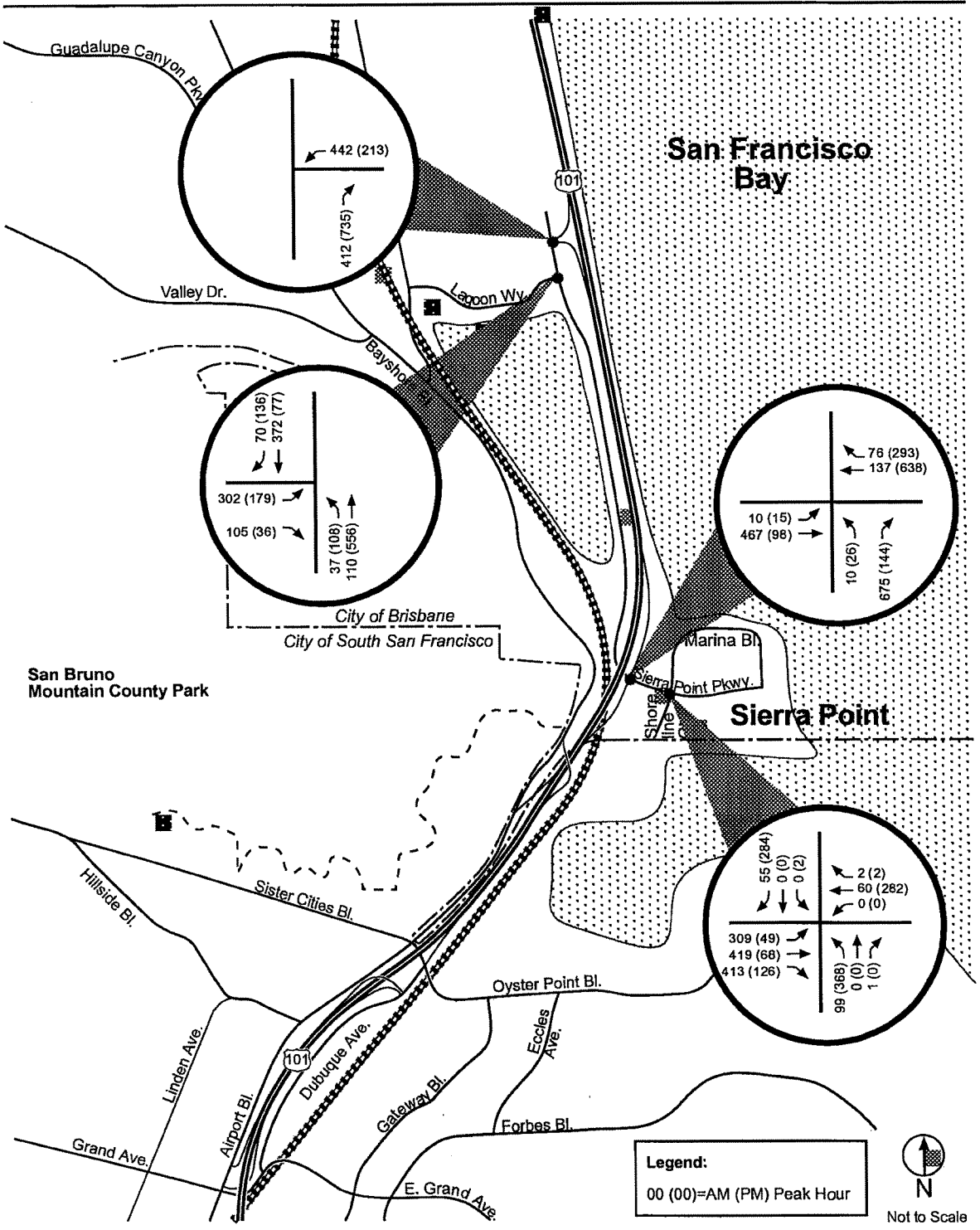

Figure 3
094-15-02

EXISTING PLUS PHASE I PEAK HOUR TRAFFIC VOLUMES

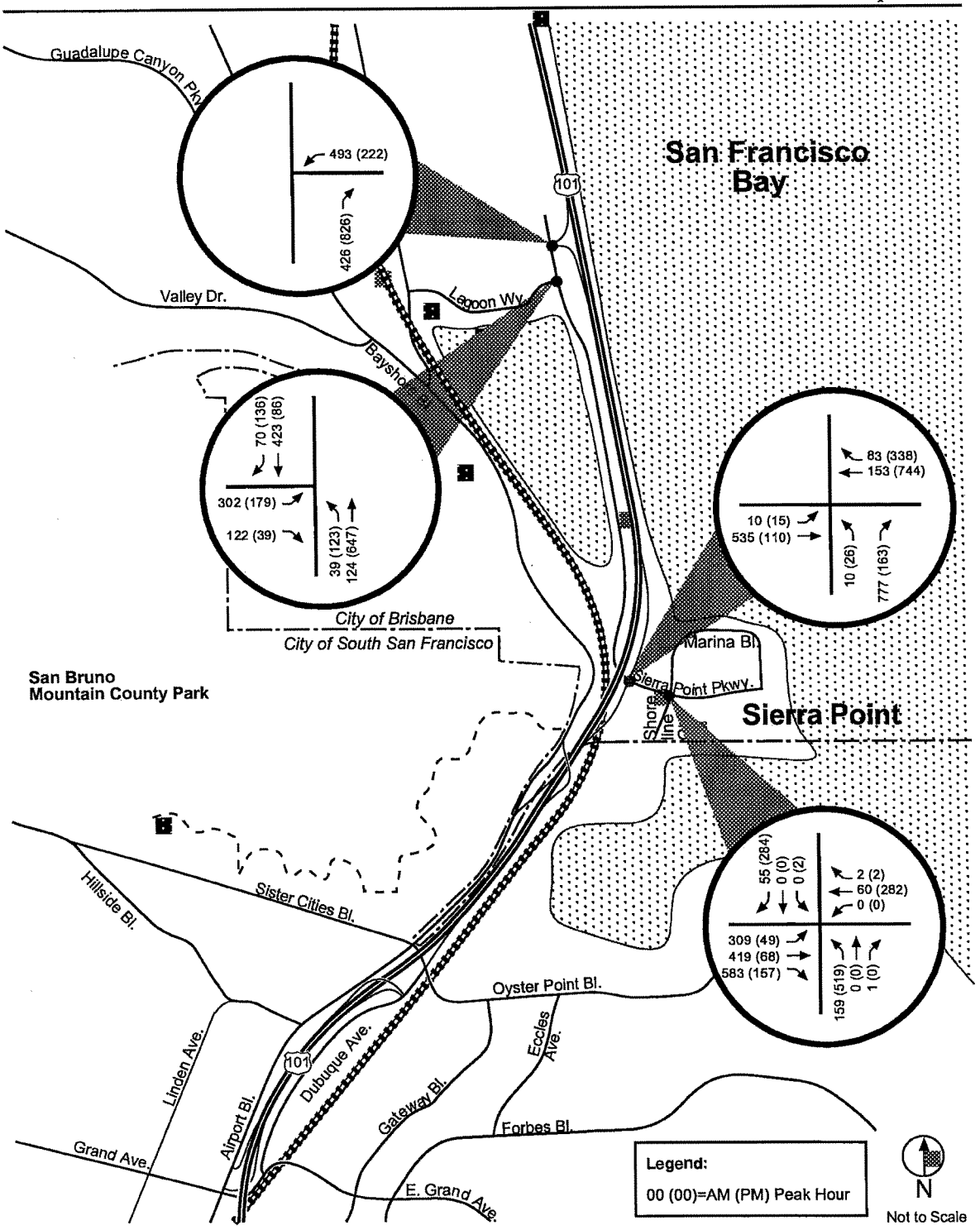

Figure 4	EXISTING PLUS PHASE I AND PHASE II PEAK HOUR TRAFFIC VOLUMES	
094-15-02		

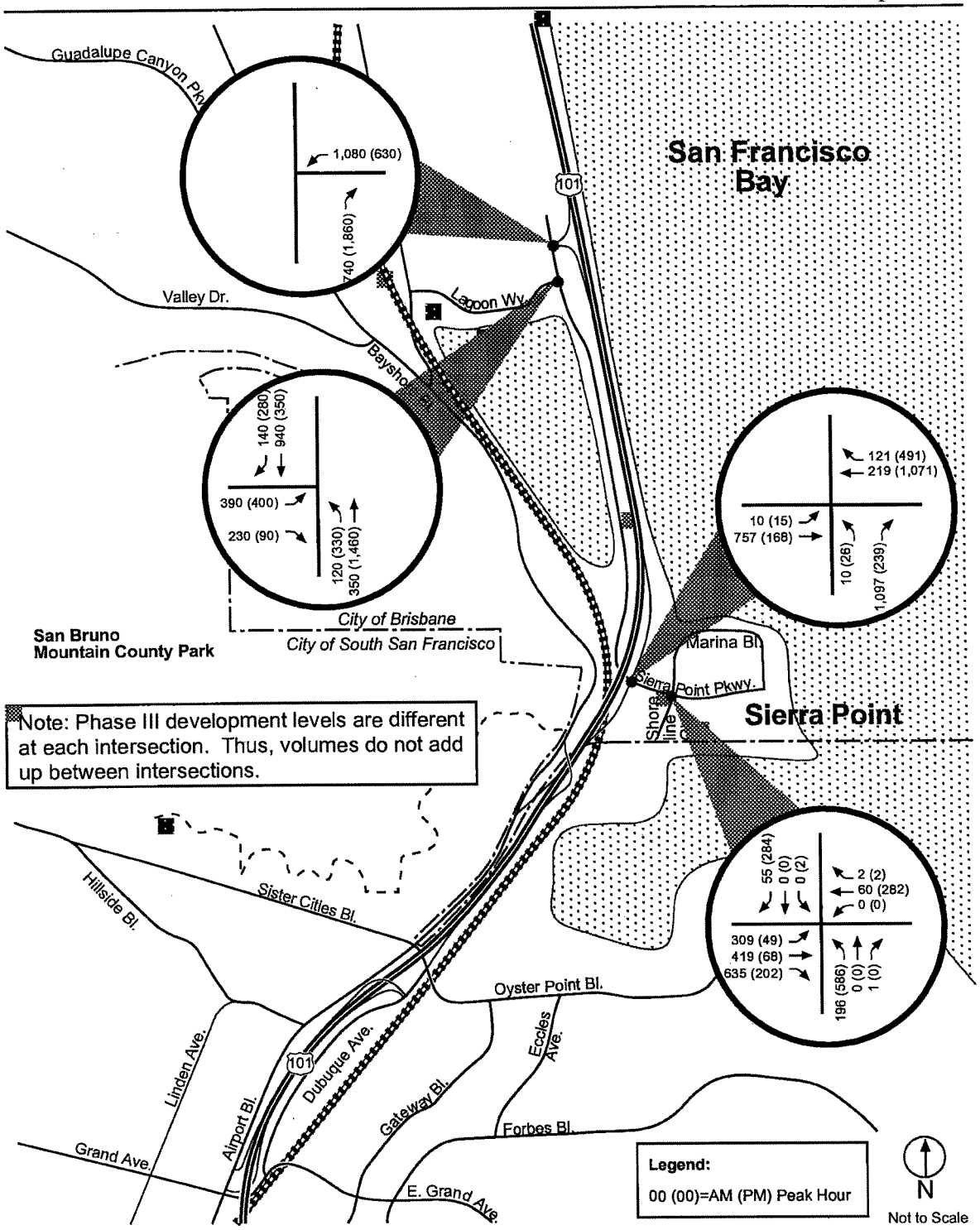

Figure 5
094-15-02

EXISTING PLUS PHASE I, II AND III PEAK HOUR TRAFFIC VOLUMES

APPENDIX D

AIR QUALITY MODELING

Appendix D-1

California Line Source Dispersion Model (CALINE-4)

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COOROINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	9	-150	9	0	* AG	478	12.1	.0	13.5
B. Bayshore NBO	*	9	0	9	150	* AG	686	11.7	.0	10.0
C. Bayshore NBL	*	5	-150	0	0	* AG	47	11.2	.0	10.0
O. Bayshore SBA	*	-12	150	-12	0	* AG	1091	12.2	.0	13.5
E. Bayshore SBO	*	-12	0	-12	-150	* AG	880	9.6	.0	10.0
F. Bayshore SBL	*	-9	150	0	0	* AG	288	11.2	.0	10.0
G. Oyster P EBA	*	-150	-9	0	-9	* AG	420	8.1	.0	13.5
H. Oyster P EBD	*	0	-9	150	-9	* AG	872	5.8	.0	11.8
I. Oyster P EBL	*	-150	-5	0	0	* AG	253	12.1	.0	10.0
J. Oyster P WBA	*	150	11	0	11	* AG	1161	9.0	.0	10.0
K. Oyster P WBD	*	0	11	-150	11	* AG	1475	6.5	.0	10.0
L. Oyster P WBL	*	150	9	0	0	* AG	175	11.2	.0	10.0
M. Bayshor NBAX	*	9	-750	9	-150	* AG	525	5.6	.0	13.5
N. Bayshor NBDX	*	9	150	9	750	* AG	686	5.6	.0	10.0
O. Bayshor SBAX	*	-12	750	-12	150	* AG	1379	5.6	.0	13.5
P. Bayshor SBDX	*	-12	-150	-12	-750	* AG	880	5.6	.0	10.0
Q. Oyster EBAX	*	-750	-9	-150	-9	* AG	673	5.6	.0	13.5
R. Oyster EBOX	*	150	-9	750	-9	* AG	872	5.6	.0	11.8
S. Oyster WBAX	*	750	11	150	11	* AG	1336	5.6	.0	10.0
T. Oyster WBDX	*	-150	11	-750	11	* AG	1475	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COOROINATES (M) X	Y	Z
1. SE	*	17	-16	1.8
2. NW	*	-21	17	1.8
3. SW	*	-19	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	17	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-19	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	17	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-19	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	*	348.	* 2.6	*	.2	.8	.0	.4	.0	.2	.0	.3
2. NW	*	98.	* 3.2	*	.0	.2	.0	.8	.0	.1	.0	.1
3. SW	*	8.	* 3.0	*	.0	.2	.0	1.4	.3	.2	.2	.0
4. NE	*	261.	* 2.9	*	.0	.5	.0	.4	.0	.1	.1	.0
5. ES mdblk	*	279.	* 1.8	*	.0	.0	.0	.1	.0	.0	.0	.7
6. WN mdblk	*	97.	* 2.2	*	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	*	81.	* 1.7	*	.0	.0	.0	.1	.0	.0	.5	.0
8. EN mdblk	*	262.	* 2.5	*	.0	.0	.0	.0	.0	.0	.1	.1

9. SE mdblk	*	352.	*	1.9	*	.8	.1	.0	.3	.1	.0	.0	.0
10. NW mdblk	*	170.	*	2.7	*	.2	.2	.0	1.7	.0	.3	.0	.0
11. SW mdblk	*	7.	*	2.2	*	.1	.2	.0	.2	1.1	.0	.0	.0
12. NE mdblk	*	190.	*	2.3	*	.0	1.2	.0	.3	.2	.2	.0	.0
13. ES blk	*	277.	*	1.5	*	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	*	96.	*	1.8	*	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	83.	*	1.3	*	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	264.	*	1.7	*	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	354.	*	1.1	*	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	174.	*	1.6	*	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	6.	*	1.3	*	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	187.	*	1.3	*	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

		CONC/LINK (PPM)										
RECEPTOR	*	I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.3	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.0	1.0	.4	.1	.0	.0	.0	.0	.0	.2	.1	.0
3. SW	*	.1	.0	.3	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.2	.3	1.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
5. ES mdblk	*	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.1	.1	1.2	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	*	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	*	.0	1.4	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.3	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	1.2
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	1.1	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	1.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.8	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.6	.4	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 3. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. OEGREES TEMP= 10.0 OEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COOROINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Congdon NBA	*	7	-150	7	0	* AG	282	10.7	.0	10.0
B. Congdon NBO	*	7	0	7	150	* AG	76	6.4	.0	10.0
C. Congdon NBL	*	5	-150	0	0	* AG	140	11.2	.0	10.0
O. Congdon SBA	*	-5	150	-5	0	* AG	490	12.1	.0	10.0
E. Congdon SBD	*	-5	0	-5	-150	* AG	532	11.2	.0	10.0
F. Congdon SBL	*	-5	150	0	0	* AG	230	12.1	.0	10.0
G. Alemany EBA	*	-150	-5	0	-5	* AG	755	8.2	.0	13.5
H. Alemany EBO	*	0	-5	150	-5	* AG	1125	5.9	.0	11.8
I. Alemany EBL	*	-150	-2	0	0	* AG	0	5.6	.0	10.0
J. Alemany WBA	*	150	11	0	11	* AG	820	8.7	.0	10.0
K. Alemany WBD	*	0	11	-150	11	* AG	984	5.9	.0	10.0
L. Alemany WBL	*	150	9	0	0	* AG	0	5.6	.0	10.0
M. Congdon NBAX	*	7	-750	7	-150	* AG	422	5.6	.0	10.0
N. Congdon NBOX	*	7	150	7	750	* AG	76	5.6	.0	10.0
O. Congdon SBAX	*	-5	750	-5	150	* AG	720	5.6	.0	10.0
P. Congdon SBOX	*	-5	-150	-5	-750	* AG	532	5.6	.0	10.0
Q. Alemany EBAX	*	-750	-5	-150	-5	* AG	755	5.6	.0	13.5
R. Alemany EBDX	*	150	-5	750	-5	* AG	1125	5.6	.0	11.8
S. Alemany WBAX	*	750	11	150	11	* AG	820	5.6	.0	10.0
T. Alemany WBDX	*	-150	11	-750	11	* AG	984	5.6	.0	10.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-13	1.8
2. NW	-12	17	1.8
3. SW	-12	-14	1.8
4. NE	14	17	1.8
5. ES mdblk	150	-13	1.8
6. WN mdblk	-150	17	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-13	1.8
14. WN blk	-600	17	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	17	1.8
17. SE blk	14	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	14	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WDRST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.8	.2	.0	.0	.0	.2	.0	.7	.2
2. NW	98.	2.1	.0	.0	.0	.4	.0	.1	.0	.2
3. SW	82.	1.9	.1	.0	.0	.0	.4	.0	.0	.7
4. NE	262.	1.7	.0	.0	.0	.2	.0	.1	.2	.0
5. ES mdblk	278.	1.6	.0	.0	.0	.0	.0	.0	.0	.9
6. WN mdblk	97.	1.6	.0	.0	.0	.0	.0	.0	.2	.2
7. WS mdblk	83.	1.5	.0	.0	.0	.0	.0	.0	.8	.1
8. EN mdblk	262.	1.7	.0	.0	.0	.0	.0	.0	.2	.2

9. SE mdblk	352.	1.4	.5	.0	.2	.1	.3	.0	.0	.0
10. NW mdblk	173.	1.8	.0	.0	.0	.9	.0	.4	.0	.0
11. SW mdblk	7.	1.5	.1	.0	.1	.0	.8	.0	.0	.0
12. NE mdblk	187.	1.0	.0	.0	.0	.2	.2	.2	.0	.0
13. ES blk	277.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.9	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.6	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SDURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE) (CONT.)

RECEPTDR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.0	.9	.1	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
4. NE	.0	.2	.7	.0	.0	.0	.0	.0	.2	.0	.0	.1
5. ES mdblk	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.1	.8	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.3	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.9
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.7	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.5	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Alemany NBA	*	7	-150	7	0	* AG	602	11.5	.0	10.0
B. Alemany NBD	*	7	0	7	150	* AG	697	7.3	.0	10.0
C. Alemany NBL	*	5	-150	0	0	* AG	85	11.2	.0	10.0
D. Alemany SBA	*	-7	150	-7	0	* AG	564	10.7	.0	10.0
E. Alemany SBD	*	-7	0	-7	-150	* AG	729	7.3	.0	10.0
F. Alemany SBL	*	-5	150	0	0	* AG	106	11.2	.0	10.0
G. Geneva A EBA	*	-150	-7	0	-7	* AG	626	8.5	.0	10.0
H. Geneva A EBD	*	0	-7	150	-7	* AG	891	5.9	.0	10.0
I. Geneva A EBL	*	-150	-5	0	0	* AG	254	12.1	.0	10.0
J. Geneva A WBA	*	150	9	0	9	* AG	702	8.2	.0	13.5
K. Geneva A WBD	*	0	9	-150	9	* AG	767	5.8	.0	11.8
L. Geneva A WBL	*	150	5	0	0	* AG	145	11.2	.0	10.0
M. Alemany NBAX	*	7	-750	7	-150	* AG	687	5.6	.0	10.0
N. Alemany NBDX	*	7	150	7	750	* AG	697	5.6	.0	10.0
D. Alemany SBAX	*	-7	750	-7	150	* AG	670	5.6	.0	10.0
P. Alemany SBDX	*	-7	-150	-7	-750	* AG	729	5.6	.0	10.0
Q. Geneva EBAX	*	-750	-7	-150	-7	* AG	880	5.6	.0	10.0
R. Geneva EBDX	*	150	-7	750	-7	* AG	891	5.6	.0	10.0
S. Geneva WBAX	*	750	9	150	9	* AG	847	5.6	.0	13.5
T. Geneva WBDX	*	-150	9	-750	9	* AG	767	5.6	.0	11.8

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 2

JOB: Sierra Point
RUN: Background C (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-14	1.8
2. NW	*	-14	16	1.8
3. SW	*	-14	-14	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-14	1.8
6. WN mdblk	*	-150	16	1.8
7. WS mdblk	*	-150	-14	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-14	1.8
14. WN blk	*	-600	16	1.8
15. WS blk	*	-600	-14	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

CALINE4: CALIFDRNIA LINE SDURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED * CONC (PPM)	*	CDNC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	278.	* 2.1	*	.4	.0	.0	.0	.2	.0	.6	.1
2. NW	*	171.	* 2.0	*	.3	.0	.0	.2	.6	.0	.2	.0
3. SW	*	8.	* 2.1	*	.0	.2	.0	.7	.1	.1	.3	.0
4. NE	*	188.	* 2.1	*	.8	.2	.0	.0	.2	.0	.0	.2
5. ES mdblk	*	277.	* 1.6	*	.0	.0	.0	.0	.0	.0	.0	.7
6. WN mdblk	*	98.	* 1.5	*	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	*	82.	* 1.8	*	.0	.0	.0	.0	.0	.0	.8	.0
8. EN mdblk	*	262.	* 1.6	*	.0	.0	.0	.0	.0	.0	.1	.1

9. SE mdblk	352.	1.9	1.0	.0	.1	.2	.2	.0	.0	.0
10. NW mdblk	172.	1.8	.2	.2	.0	.9	.0	.2	.0	.0
11. SW mdblk	8.	1.6	.3	.1	.0	.0	.8	.0	.0	.0
12. NE mdblk	187.	1.6	.1	.7	.0	.2	.1	.0	.0	.0
13. ES blk	276.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.2	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE) (CONT.)

	CDNC/LINK (PPM)											
RECEPTOR	I	J	K	L	M	N	D	P	Q	R	S	T
1. SE	.3	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.1	.0	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	.1	.0	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NE	.0	.3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.8	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.3	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.7
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.7	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.6	.0	.0	.3	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.6	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.7	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 1

JDB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission NBA	2	-150	2	0	AG	558	9.0	.0	10.0
B. Mission NBD	2	0	2	150	AG	720	6.1	.0	10.0
C. Mission NBL	2	-150	0	0	AG	39	11.2	.0	10.0
D. Mission SBA	-4	150	-4	0	AG	478	9.0	.0	10.0
E. Mission SBD	-4	0	-4	-150	AG	433	6.1	.0	10.0
F. Mission SBL	-2	150	0	0	AG	116	11.2	.0	10.0
G. Geneva A EBA	-150	-7	0	-7	AG	899	9.6	.0	10.0
H. Geneva A EBD	0	-7	150	-7	AG	1050	6.4	.0	10.0
I. Geneva A EBL	-150	-5	0	0	AG	6	11.2	.0	10.0
J. Geneva A WBA	150	7	0	7	AG	1088	10.2	.0	10.0
K. Geneva A WBD	0	7	-150	7	AG	985	6.2	.0	10.0
L. Geneva A WBL	150	5	0	0	AG	4	11.2	.0	10.0
M. Mission NBAX	2	-750	2	-150	AG	597	5.6	.0	10.0
N. Mission NBDX	2	150	2	750	AG	720	5.6	.0	10.0
O. Mission SBAX	-4	750	-4	150	AG	594	5.6	.0	10.0
P. Mission SBDX	-4	-150	-4	-750	AG	433	5.6	.0	10.0
Q. Geneva EBAX	-750	-7	-150	-7	AG	905	5.6	.0	10.0
R. Geneva EBDX	150	-7	750	-7	AG	1050	5.6	.0	10.0
S. Geneva WBAX	750	7	150	7	AG	1092	5.6	.0	10.0
T. Geneva WBDX	-150	7	-750	7	AG	985	5.6	.0	10.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	278.	2.2	.3	.0	.0	.0	.1	.0	1.1	.0
2. NW	98.	2.6	.0	.2	.0	.3	.0	.0	.0	.2
3. SW	81.	2.1	.2	.0	.0	.0	.2	.0	.1	.8
4. NE	261.	2.1	.0	.3	.0	.2	.0	.0	.4	.0
5. ES mdblk	278.	1.8	.0	.0	.0	.0	.0	.0	.1	.9
6. WN mdblk	97.	1.7	.0	.0	.0	.0	.0	.0	.3	.2
7. WS mdblk	83.	2.1	.0	.0	.0	.0	.0	.0	1.2	.0
8. EN mdblk	262.	2.3	.0	.0	.0	.0	.0	.0	.2	.2

9. SE mdblk	354.	1.5	.7	.0	.0	.1	.2	.0	.0	.0
10. NW mdblk	173.	1.6	.1	.3	.0	.6	.0	.2	.0	.0
11. SW mdblk	6.	1.4	.3	.0	.0	.0	.4	.0	.0	.0
12. NE mdblk	187.	1.5	.0	.6	.0	.3	.0	.1	.0	.0
13. ES blk	277.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.2	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.2
2. NW	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
3. SW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	.0	.1	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.0	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.2	.8	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.4	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.8
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.9	.0
17. SE blk	.0	.0	.0	.0	.5	.0	.0	.3	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.4	.5	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.4	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.3	.0	.0	.0	.0	.0

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CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	11	-150	11	0	* AG	419	8.2	.0	10.0
B. Bayshore NBD	*	11	0	11	150	* AG	924	5.9	.0	10.0
C. Bayshore NBL	*	9	-150	0	0	* AG	549	12.1	.0	10.0
D. Bayshore SBA	*	-11	150	-11	0	* AG	813	8.7	.0	17.0
E. Bayshore SBD	*	-11	0	-11	-150	* AG	703	5.9	.0	10.0
F. Bayshore SBL	*	-5	150	0	0	* AG	47	11.2	.0	10.0
G. Geneva A EBA	*	-150	-11	0	-11	* AG	332	10.3	.0	10.0
H. Geneva A EBD	*	0	-11	150	-11	* AG	47	6.4	.0	10.0
I. Geneva A EBL	*	-150	-9	0	0	* AG	505	12.1	.0	10.0
J. Geneva A WBA	*	150	0	0	0	* AG	0	5.6	.0	10.0
K. Geneva A WBD	*	0	0	-150	0	* AG	991	9.6	.0	10.0
L. Geneva A WBL	*	150	2	0	0	* AG	0	5.6	.0	10.0
M. Bayshor NBAX	*	11	-750	11	-150	* AG	968	5.6	.0	10.0
N. Bayshor NBDX	*	11	150	11	750	* AG	924	5.6	.0	10.0
O. Bayshor SBAX	*	-11	750	-11	150	* AG	860	5.6	.0	17.0
P. Bayshor SBDX	*	-11	-150	-11	-750	* AG	703	5.6	.0	10.0
Q. Geneva EBAX	*	-750	-11	-150	-11	* AG	837	5.6	.0	10.0
R. Geneva EBDX	*	150	-11	750	-11	* AG	47	5.6	.0	10.0
S. Geneva WBAX	*	750	0	150	0	* AG	0	5.6	.0	10.0
T. Geneva WBDX	*	-150	0	-750	0	* AG	991	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-17	1.8
2. NW	*	-21	7	1.8
3. SW	*	-17	-17	1.8
4. NE	*	17	7	1.8
5. ES mdblk	*	150	-17	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-17	-150	1.8
12. NE mdblk	*	17	150	1.8
13. ES blk	*	600	-17	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-17	-600	1.8
20. NE blk	*	17	600	1.8

CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WDRST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	278.	* 2.2	*	.2	.0	.3	.0	.1	.0	.4	.0
2. NW	*	260.	* 2.4	*	.0	.0	.0	.0	.0	.0	.2	.0
3. SW	*	6.	* 2.2	*	.0	.0	.0	.7	.1	.0	.2	.0
4. NE	*	263.	* 2.8	*	.0	.3	.0	.2	.0	.0	.2	.0
5. ES mdblk	*	273.	* 1.0	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	101.	* 2.2	*	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	*	76.	* 2.0	*	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	*	268.	* .9	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	349.	1.9	.5	.0	.7	.2	.1	.0	.0	.0
10. NW mdblk	173.	1.6	.0	.0	.2	.8	.0	.0	.0	.0
11. SW mdblk	7.	1.4	.0	.1	.2	.1	.6	.0	.0	.0
12. NE mdblk	189.	1.6	.0	.8	.1	.2	.1	.0	.0	.0
13. ES blk	272.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	268.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.4	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.7	.0	1.3	.0	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	.3	.0	.4	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	.7	.0	1.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
5. ES mdblk	.2	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
6. WN mdblk	.4	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.7	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.2	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
9. SE mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.9
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.4
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.8	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.7	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.6	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.8	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. OEGREES
ZO= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK OESCRIPTION	LINK COOROINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	9	-150	9	0	AG	910	8.7	.0	13.5
B. Bayshore NBO	9	0	9	150	AG	1049	6.0	.0	10.0
C. Bayshore NBL	5	-150	0	0	AG	84	11.2	.0	10.0
D. Bayshore SBA	-9	150	-9	0	AG	917	8.7	.0	13.5
E. Bayshore SBO	-9	0	-9	-150	AG	994	5.9	.0	10.0
F. Bayshore SBL	-5	150	0	0	AG	141	11.2	.0	10.0
G. Old Coun EBA	-150	-7	0	-7	AG	202	10.7	.0	10.0
H. Old Coun EBO	0	-7	150	-7	AG	276	6.7	.0	10.0
I. Old Coun EBL	-150	-5	0	0	AG	73	11.2	.0	10.0
J. Old Coun WBA	150	4	0	4	AG	241	10.7	.0	10.0
K. Old Coun WBD	0	4	-150	4	AG	284	6.7	.0	10.0
L. Old Coun WBL	150	2	0	0	AG	35	11.2	.0	10.0
M. Bayshor NBAX	9	-750	9	-150	AG	994	5.6	.0	13.5
N. Bayshor NBDX	9	150	9	750	AG	1049	5.6	.0	10.0
O. Bayshor SBAX	-9	750	-9	150	AG	1058	5.6	.0	13.5
P. Bayshor SBDX	-9	-150	-9	-750	AG	994	5.6	.0	10.0
Q. Old Cou EBAX	-750	-7	-150	-7	AG	275	5.6	.0	10.0
R. Old Cou EBOX	150	-7	750	-7	AG	276	5.6	.0	10.0
S. Old Cou WBAX	750	4	150	4	AG	276	5.6	.0	10.0
T. Old Cou WBDX	-150	4	-750	4	AG	284	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	17	-14	1.8
2. NW	-17	10	1.8
3. SW	-15	-14	1.8
4. NE	15	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	15	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	17	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.7	.2	.6	.0	.3	.0	.1	.0	.1
2. NW	170.	1.6	.3	.0	.0	.1	.6	.0	.0	.0
3. SW	7.	2.0	.0	.1	.0	.9	.1	.1	.1	.0
4. NE	187.	1.9	1.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	277.	.9	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.9	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	1.0	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	1.0	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	1.8	1.0	.0	.0	.2	.1	.0	.0	.0
10. NW mdblk	172.	1.9	.2	.1	.0	1.0	.0	.1	.0	.0
11. SW mdblk	7.	1.6	.2	.2	.0	.1	.8	.0	.0	.0
12. NE mdblk	188.	1.7	.0	.9	.0	.2	.1	.0	.0	.0
13. ES blk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	.0	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	.0	.0	.0	.0	.8	.0	.0	.3	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.9	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.9	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.9	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. OEGREES
ZO= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 OEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK OESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tunnel A NBA	*	2	-150	2	0	* AG	287	8.2	.0	10.0
B. Tunnel A NBD	*	2	0	2	150	* AG	124	5.8	.0	10.0
C. Tunnel A NBL	*	2	-150	0	0	* AG	0	5.6	.0	10.0
D. Tunnel A SBA	*	-19	150	-19	0	* AG	41	8.1	.0	10.0
E. Tunnel A SBO	*	-19	0	-19	-150	* AG	240	5.8	.0	10.0
F. Tunnel A SBL	*	-19	150	0	0	* AG	8	11.2	.0	10.0
G. Lagoon W EBA	*	-150	-2	0	-2	* AG	0	5.6	.0	10.0
H. Lagoon W EBD	*	0	-2	150	-2	* AG	181	6.4	.0	10.0
I. Lagoon W EBL	*	-150	-2	0	0	* AG	0	5.6	.0	10.0
J. Lagoon W WBA	*	150	0	0	0	* AG	10	10.3	.0	10.0
K. Lagoon W WBO	*	0	0	-150	0	* AG	0	5.6	.0	10.0
L. Lagoon W WBL	*	150	2	0	0	* AG	199	11.2	.0	10.0
M. Tunnel NBAX	*	2	-750	2	-150	* AG	287	5.6	.0	10.0
N. Tunnel NBDX	*	2	150	2	750	* AG	124	5.6	.0	10.0
O. Tunnel SBAX	*	-19	750	-19	150	* AG	49	5.6	.0	10.0
P. Tunnel SBOX	*	-19	-150	-19	-750	* AG	240	5.6	.0	10.0
Q. Lagoon EBAX	*	-750	-2	-150	-2	* AG	0	5.6	.0	10.0
R. Lagoon EBOX	*	150	-2	750	-2	* AG	181	5.6	.0	10.0
S. Lagoon WBAX	*	750	0	150	0	* AG	209	5.6	.0	10.0
T. Lagoon WBOX	*	-150	0	-750	0	* AG	0	5.6	.0	10.0

□□

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-26	7	1.8
3. SW	*	-26	-8	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-26	150	1.8
11. SW mdblk	*	-26	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-26	600	1.8
19. SW blk	*	-26	-600	1.8
20. NE blk	*	8	600	1.8

□□

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (OEG)	* PREO CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	83.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	*	95.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	*	85.	* .6	*	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	*	187.	* .7	*	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	279.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	*	92.	* .2	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	89.	* .2	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	262.	* .7	*	.0	.0	.0	.0	.0	.0	.0	.1

9. SE mdblk	352.	.5	.4	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	13.	.4	.0	.0	.0	.0	.2	.0	.0	.0	.0
12. NE mdblk	183.	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	183.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSIDN
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE) (CONT.)

RECEPTDR	CONC/LINK (PPM) I	J	K	L	M	N	D	P	Q	R	S	T
1. SE	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
ZO= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK CDDRDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Sierra P NBA	5	-150	5	0	AG	544	9.0	.0	10.0
B. Sierra P NBD	5	0	5	150	AG	629	6.2	.0	10.0
C. Sierra P NBL	5	-150	0	0	AG	92	11.2	.0	10.0
D. Sierra P SBA	-4	150	-4	0	AG	213	8.2	.0	10.0
E. Sierra P SBD	-4	0	-4	-150	AG	92	5.8	.0	10.0
F. Sierra P SBL	-2	150	0	0	AG	0	5.6	.0	10.0
G. Lagoond EBA	-150	-5	0	-5	AG	49	10.3	.0	10.0
H. Lagoond EBD	0	-5	150	-5	AG	0	5.6	.0	10.0
I. Lagoond EBL	-150	-5	0	0	AG	85	11.2	.0	10.0
J. Lagoond WBA	150	0	0	0	AG	0	5.6	.0	10.0
K. Lagoond WBD	0	0	-150	0	AG	262	6.7	.0	10.0
L. Lagoond WBL	150	2	0	0	AG	0	5.6	.0	10.0
M. Sierra NBAX	5	-750	5	-150	AG	636	5.6	.0	10.0
N. Sierra NBDX	5	150	5	750	AG	629	5.6	.0	10.0
O. Sierra SBAX	-4	750	-4	150	AG	213	5.6	.0	10.0
P. Sierra SBDX	-4	-150	-4	-750	AG	92	5.6	.0	10.0
Q. Lagoond EBAX	-750	-5	-150	-5	AG	134	5.6	.0	10.0
R. Lagoond EBDX	150	-5	750	-5	AG	0	5.6	.0	10.0
S. Lagoond WBAX	750	0	150	0	AG	0	5.6	.0	10.0
T. Lagoond WBDX	-150	0	-750	0	AG	262	5.6	.0	10.0

CALINE4: CALIFDRNIA LINE SDURCE DISPERSIDN MDDEL
JUNE 1989 VERSIDN
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	12	-12	1.8
2. NW	-10	7	1.8
3. SW	-10	-12	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	12	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	7	1.8
17. SE blk	12	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	12	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	BRG (DEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	187.	1.0	.7	.0	.1	.0	.0	.0	.0	.0
2. NW	171.	.8	.3	.0	.1	.0	.0	.0	.0	.0
3. SW	7.	.8	.0	.2	.0	.2	.0	.0	.0	.0
4. NE	187.	1.0	.7	.0	.1	.0	.0	.0	.0	.0
5. ES mdblk	272.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	100.	.6	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	79.	.5	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	268.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	353.	1.1	.7	.0	.2	.0	.0	.0	.0	.0
10. NW mdblk	173.	.7	.1	.2	.0	.3	.0	.0	.0	.0
11. SW mdblk	7.	.7	.3	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.9	.0	.5	.0	.1	.0	.0	.0	.0
13. ES blk	270.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	269.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.1	.0	.0	.0	.0	.0

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CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WDRST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. US 101 N NBA	*	4	-150	4	0	* AG	76	10.3	.0	10.0
B. US 101 N NBD	*	4	0	4	150	* AG	441	9.6	.0	10.0
C. US 101 N NBL	*	2	-150	0	0	* AG	13	11.2	.0	10.0
D. US 101 N SBA	*	0	150	0	0	* AG	0	5.6	.0	10.0
E. US 101 N SBD	*	0	0	0	-150	* AG	0	5.6	.0	10.0
F. US 101 N SBL	*	-2	150	0	0	* AG	0	5.6	.0	10.0
G. Sierra P EBA	*	-150	-5	0	-5	* AG	63	8.1	.0	10.0
H. Sierra P EBD	*	0	-5	150	-5	* AG	139	5.8	.0	10.0
I. Sierra P EBL	*	-150	-5	0	0	* AG	25	11.2	.0	10.0
J. Sierra P WBA	*	150	4	0	4	* AG	919	11.8	.0	10.0
K. Sierra P WBD	*	0	4	-150	4	* AG	516	6.0	.0	10.0
L. Sierra P WBL	*	150	2	0	0	* AG	0	5.6	.0	10.0
M. US 101 NBAX	*	4	-750	4	-150	* AG	89	5.6	.0	10.0
N. US 101 NBDX	*	4	150	4	750	* AG	441	5.6	.0	10.0
O. US 101 SBAX	*	0	750	0	150	* AG	0	5.6	.0	10.0
P. US 101 SBDX	*	0	-150	0	-750	* AG	0	5.6	.0	10.0
Q. Sierra EBAX	*	-750	-5	-150	-5	* AG	88	5.6	.0	10.0
R. Sierra EBDX	*	150	-5	750	-5	* AG	139	5.6	.0	10.0
S. Sierra WBAX	*	750	4	150	4	* AG	919	5.6	.0	10.0
T. Sierra WBDX	*	-150	4	-750	4	* AG	516	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTDR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	10	-12	1.8
2. NW	*	-7	10	1.8
3. SW	*	-7	-12	1.8
4. NE	*	10	10	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	10	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	10	1.8
9. SE mdblk	*	10	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	10	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	10	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	10	1.8
17. SE blk	*	10	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	10	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 3

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTDR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	354.	1.1	*	.0	.5	.0	.0	.0	.0	.0	.0
2. NW	*	97.	1.9	*	.0	.2	.0	.0	.0	.0	.0	.0
3. SW	*	80.	1.0	*	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	*	98.	1.7	*	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	282.	1.0	*	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	94.	.9	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	84.	.7	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	262.	1.7	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	358.	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.6	.0	.4	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.8	.0	.6	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	ZO=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. OEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK OESCRIPTION	LINK COOROINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Shorelin NBA	5	-150	5	0	AG	8	8.8	.0	11.8
B. Shorelin NBD	5	0	5	150	AG	33	6.0	.0	10.0
C. Shorelin NBL	2	-150	0	0	AG	333	12.2	.0	10.0
O. Shorelin SBA	-5	150	-5	0	AG	391	8.8	.0	11.8
E. Shorelin SBO	-5	0	-5	-150	AG	88	6.0	.0	10.0
F. Shorelin SBL	-2	150	0	0	AG	0	5.6	.0	10.0
G. Sierra P EBA	-150	-9	0	-9	AG	134	8.8	.0	13.5
H. Sierra P EBD	0	-9	150	-9	AG	53	6.0	.0	10.0
I. Sierra P EBL	-150	-5	0	0	AG	23	11.2	.0	10.0
J. Sierra P WBA	150	9	0	9	AG	228	8.8	.0	13.5
K. Sierra P WBO	0	9	-150	9	AG	947	6.2	.0	10.0
L. Sierra P WBL	150	5	0	0	AG	4	11.2	.0	10.0
M. Shoreli NBAX	5	-750	5	-150	AG	341	5.6	.0	11.8
N. Shoreli NBOX	5	150	5	750	AG	33	5.6	.0	10.0
O. Shoreli SBAX	-5	750	-5	150	AG	391	5.6	.0	11.8
P. Shoreli SBOX	-5	-150	-5	-750	AG	88	5.6	.0	10.0
Q. Sierra EBAX	-750	-9	-150	-9	AG	157	5.6	.0	13.5
R. Sierra EBDX	150	-9	750	-9	AG	53	5.6	.0	10.0
S. Sierra WBAX	750	9	150	9	AG	232	5.6	.0	13.5
T. Sierra WBDX	-150	9	-750	9	AG	947	5.6	.0	10.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-15	1.8
2. NW	-13	15	1.8
3. SW	-12	-17	1.8
4. NE	12	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-13	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	13	-600	1.8
18. NW blk	-13	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	278.	.8	.0	.0	.2	.0	.0	.0	.2	.0
2. NW	170.	1.1	.0	.0	.4	.1	.0	.0	.0	.0
3. SW	5.	.8	.0	.0	.0	.4	.0	.0	.0	.0
4. NE	262.	1.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	99.	1.0	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	77.	.6	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.7	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	351.	.7	.0	.0	.4	.0	.0	.0	.0	.0
10. NW mdblk	174.	.8	.0	.0	.1	.5	.0	.0	.0	.0
11. SW mdblk	6.	.6	.0	.0	.3	.0	.0	.0	.0	.0
12. NE mdblk	187.	.5	.0	.0	.0	.2	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Background C (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	9	-150	9	0	* AG	754	1.7	.0	13.5
B. Bayshore NBD	*	9	0	9	150	* AG	684	1.6	.0	10.0
C. Bayshore NBL	*	5	-150	0	0	* AG	36	1.6	.0	10.0
D. Bayshore SBA	*	-12	150	-12	0	* AG	1644	1.7	.0	13.5
E. Bayshore SBD	*	-12	0	-12	-150	* AG	1114	1.6	.0	10.0
F. Bayshore SBL	*	-9	150	0	0	* AG	365	1.6	.0	10.0
G. Oyster P EBA	*	-150	-9	0	-9	* AG	88	1.2	.0	13.5
H. Oyster P EBD	*	0	-9	150	-9	* AG	639	1.0	.0	11.8
I. Dyster P EBL	*	-150	-5	0	0	* AG	76	1.6	.0	10.0
J. Oyster P WBA	*	150	11	0	11	* AG	392	1.2	.0	10.0
K. Dyster P WBD	*	0	11	-150	11	* AG	971	1.0	.0	10.0
L. Oyster P WBL	*	150	9	0	0	* AG	53	1.6	.0	10.0
M. Bayshor NBAX	*	9	-750	9	-150	* AG	790	.9	.0	13.5
N. Bayshor NBDX	*	9	150	9	750	* AG	684	.9	.0	10.0
O. Bayshor SBAX	*	-12	750	-12	150	* AG	2009	.9	.0	13.5
P. Bayshor SBDX	*	-12	-150	-12	-750	* AG	1114	.9	.0	10.0
Q. Oyster EBAX	*	-750	-9	-150	-9	* AG	164	.9	.0	13.5
R. Oyster EBDX	*	150	-9	750	-9	* AG	639	.9	.0	11.8
S. Oyster WBAX	*	750	11	150	11	* AG	445	.9	.0	10.0
T. Oyster WBDX	*	-150	11	-750	11	* AG	971	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTDR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-16	1.8
2. NW	*	-21	17	1.8
3. SW	*	-19	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	17	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-19	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	17	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-19	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SDURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 3

JDB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	347.	* .4	*	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	*	10.	* .4	*	.0	.0	.0	.3	.0	.0	.0	.0
3. SW	*	7.	* .5	*	.0	.0	.0	.3	.0	.0	.0	.0
4. NE	*	263.	* .3	*	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	278.	* .2	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	97.	* .2	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	81.	* .1	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	264.	* .2	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	* 352.	* .3	* .2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	* 170.	* .5	* .0	.0	.0	.3	.0	.0	.0	.0	.0
11. SW mdblk	* 7.	* .4	* .0	.0	.0	.0	.2	.0	.0	.0	.0
12. NE mdblk	* 190.	* .3	* .0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	* 276.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	* 96.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	* 83.	* .1	* .0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	* 264.	* .1	* .0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	* 354.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	* 174.	* .3	* .0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	* 6.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	* 187.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VO= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COOROINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Congdon NBA	*	7	-150	7	0	* AG	171	1.5	.0	10.0
B. Congdon NBO	*	7	0	7	150	* AG	40	1.0	.0	10.0
C. Congdon NBL	*	5	-150	0	0	* AG	29	1.6	.0	10.0
O. Congdon SBA	*	-5	150	-5	0	* AG	234	1.5	.0	10.0
E. Congdon SBD	*	-5	0	-5	-150	* AG	277	1.1	.0	10.0
F. Congdon SBL	*	-5	150	0	0	* AG	122	1.6	.0	10.0
G. Alemany EBA	*	-150	-5	0	-5	* AG	557	1.2	.0	13.5
H. Alemany EBD	*	0	-5	150	-5	* AG	769	1.0	.0	11.8
I. Alemany EBL	*	-150	-2	0	0	* AG	0	.9	.0	10.0
J. Alemany WBA	*	150	11	0	11	* AG	1185	1.3	.0	10.0
K. Alemany WBO	*	0	11	-150	11	* AG	1212	1.0	.0	10.0
L. Alemany WBL	*	150	9	0	0	* AG	0	.9	.0	10.0
M. Congdon NBAX	*	7	-750	7	-150	* AG	200	.9	.0	10.0
N. Congdon NBDX	*	7	150	7	750	* AG	40	.9	.0	10.0
O. Congdon SBAX	*	-5	750	-5	150	* AG	356	.9	.0	10.0
P. Congdon SBDX	*	-5	-150	-5	-750	* AG	277	.9	.0	10.0
Q. Alemany EBAX	*	-750	-5	-150	-5	* AG	557	.9	.0	13.5
R. Alemany EBDX	*	150	-5	750	-5	* AG	769	.9	.0	11.8
S. Alemany WBAX	*	750	11	150	11	* AG	1185	.9	.0	10.0
T. Alemany WBDX	*	-150	11	-750	11	* AG	1212	.9	.0	10.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-13	1.8
2. NW	-12	17	1.8
3. SW	-12	-14	1.8
4. NE	14	17	1.8
5. ES mdblk	150	-13	1.8
6. WN mdblk	-150	17	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-13	1.8
14. WN blk	-600	17	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	17	1.8
17. SE blk	14	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	14	600	1.8

JDB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTDR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	81.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	353.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTDR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 3. (M)
BRG= WDRST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Alemany NBA	*	7	-150	7	0	* AG	183	1.5	.0	10.0
B. Alemany NBD	*	7	0	7	150	* AG	1167	1.6	.0	10.0
C. Alemany NBL	*	5	-150	0	0	* AG	7	1.6	.0	10.0
D. Alemany SBA	*	-7	150	-7	0	* AG	687	1.6	.0	10.0
E. Alemany SBD	*	-7	0	-7	-150	* AG	629	1.2	.0	10.0
F. Alemany SBL	*	-5	150	0	0	* AG	904	1.7	.0	10.0
G. Geneva A EBA	*	-150	-7	0	-7	* AG	872	1.3	.0	10.0
H. Geneva A EBD	*	0	-7	150	-7	* AG	1808	1.3	.0	10.0
I. Geneva A EBL	*	-150	-5	0	0	* AG	387	1.7	.0	10.0
J. Geneva A WBA	*	150	9	0	9	* AG	1568	1.3	.0	22.3
K. Geneva A WBD	*	0	9	-150	9	* AG	1115	.9	.0	20.5
L. Geneva A WBL	*	150	2	0	0	* AG	111	1.6	.0	10.0
M. Alemany NBAX	*	7	-750	7	-150	* AG	190	.9	.0	10.0
N. Alemany NBDX	*	7	150	7	750	* AG	1167	.9	.0	10.0
D. Alemany SBAX	*	-7	750	-7	150	* AG	1591	.9	.0	10.0
P. Alemany SBDX	*	-7	-150	-7	-750	* AG	629	.9	.0	10.0
Q. Geneva EBAX	*	-750	-7	-150	-7	* AG	1259	.9	.0	10.0
R. Geneva EBDX	*	150	-7	750	-7	* AG	1808	.9	.0	10.0
S. Geneva WBAX	*	750	9	150	9	* AG	1679	.9	.0	22.3
T. Geneva WBDX	*	-150	9	-750	9	* AG	1115	.9	.0	20.5

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSIDN
PAGE 2

JDB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LDCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-14	1.8
2. NW	*	-14	21	1.8
3. SW	*	-14	-14	1.8
4. NE	*	14	21	1.8
5. ES mdblk	*	150	-14	1.8
6. WN mdblk	*	-150	21	1.8
7. WS mdblk	*	-150	-14	1.8
8. EN mdblk	*	150	21	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-14	1.8
14. WN blk	*	-600	21	1.8
15. WS blk	*	-600	-14	1.8
16. EN blk	*	600	21	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

CALINE4: CALIFORNIA LINE SDURCE DISPERSIDN MODEL
JUNE 1989 VERSIDN
PAGE 3

JOB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CDNC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	351.	.6	*	.0	.2	.0	.0	.0	.0	.0	.1
2. NW	*	99.	.5	*	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	9.	.5	*	.0	.0	.0	.1	.0	.1	.0	.0
4. NE	*	259.	.4	*	.0	.1	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	280.	.5	*	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	*	97.	.3	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	82.	.4	*	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	*	262.	.4	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	168.	.5	.0	.0	.0	.0	.2	.0	.2	.0	.0
11. SW mdblk	6.	.3	.0	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	191.	.5	.0	.3	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSIDN
PAGE 4

JDB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

	CONC/LINK (PPM)										
RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission NBA	2	-150	2	0	AG	1227	1.6	.0	10.0
B. Mission NBD	2	0	2	150	AG	1197	1.0	.0	10.0
C. Mission NBL	2	-150	0	0	AG	160	1.6	.0	10.0
D. Mission SBA	-4	150	-4	0	AG	2151	1.7	.0	10.0
E. Mission SBD	-4	0	-4	-150	AG	2545	1.5	.0	10.0
F. Mission SBL	-2	150	0	0	AG	142	1.6	.0	10.0
G. Geneva A EBA	-150	-7	0	-7	AG	1908	1.7	.0	10.0
H. Geneva A EBD	0	-7	150	-7	AG	1648	1.4	.0	10.0
I. Geneva A EBL	-150	-5	0	0	AG	9	1.6	.0	10.0
J. Geneva A WBA	150	7	0	7	AG	1672	1.7	.0	10.0
K. Geneva A WBD	0	7	-150	7	AG	1897	1.5	.0	10.0
L. Geneva A WBL	150	5	0	0	AG	18	1.6	.0	10.0
M. Mission NBAX	2	-750	2	-150	AG	1387	.9	.0	10.0
N. Mission NBDX	2	150	2	750	AG	1197	.9	.0	10.0
D. Mission SBAX	-4	750	-4	150	AG	2293	.9	.0	10.0
P. Mission SBDX	-4	-150	-4	-750	AG	2545	.9	.0	10.0
Q. Geneva EBAX	-750	-7	-150	-7	AG	1917	.9	.0	10.0
R. Geneva EBDX	150	-7	750	-7	AG	1648	.9	.0	10.0
S. Geneva WBAX	750	7	150	7	AG	1690	.9	.0	10.0
T. Geneva WBDX	-150	7	-750	7	AG	1897	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (OEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	279.	.9	.1	.0	.0	.0	.2	.0	.4	.0
2. NW	171.	1.0	.1	.0	.0	.1	.4	.0	.1	.0
3. SW	9.	.9	.0	.0	.0	.4	.1	.0	.2	.0
4. NE	189.	.8	.2	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	99.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	82.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.7	.3	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	173.	.7	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	.8	.1	.0	.0	.0	.5	.0	.0	.0
12. NE mdblk	187.	.6	.0	.2	.0	.2	.0	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	11	-150	11	0	* AG	1090	1.3	.0	10.0
B. Bayshore NBD	*	11	0	11	150	* AG	1724	1.1	.0	10.0
C. Bayshore NBL	*	9	-150	0	0	* AG	1480	1.7	.0	10.0
D. Bayshore SBA	*	-11	150	-11	0	* AG	2318	1.6	.0	17.0
E. Bayshore SBD	*	-11	0	-11	-150	* AG	2552	1.3	.0	10.0
F. Bayshore SBL	*	-5	150	0	0	* AG	87	1.6	.0	10.0
G. Geneva A EBA	*	-150	-11	0	-11	* AG	1025	1.7	.0	10.0
H. Geneva A EBD	*	0	-11	150	-11	* AG	89	1.0	.0	10.0
I. Geneva A EBL	*	-150	-9	0	0	* AG	585	1.7	.0	10.0
J. Geneva A WBA	*	150	7	0	7	* AG	102	1.5	.0	10.0
K. Geneva A WBD	*	0	7	-150	7	* AG	2427	1.7	.0	10.0
L. Geneva A WBL	*	150	5	0	0	* AG	105	1.6	.0	10.0
M. Bayshor NBAX	*	11	-750	11	-150	* AG	2570	.9	.0	10.0
N. Bayshor NBDX	*	11	150	11	750	* AG	1724	.9	.0	10.0
O. Bayshor SBAX	*	-11	750	-11	150	* AG	2405	.9	.0	17.0
P. Bayshor SBDX	*	-11	-150	-11	-750	* AG	2552	.9	.0	10.0
Q. Geneva EBAX	*	-750	-11	-150	-11	* AG	1610	.9	.0	10.0
R. Geneva EBDX	*	150	-11	750	-11	* AG	89	.9	.0	10.0
S. Geneva WBAX	*	750	7	150	7	* AG	207	.9	.0	10.0
T. Geneva WBDX	*	-150	7	-750	7	* AG	2427	.9	.0	10.0

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LDCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-17	1.8
2. NW	*	-21	14	1.8
3. SW	*	-17	-17	1.8
4. NE	*	17	14	1.8
5. ES mdblk	*	150	-17	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-17	-150	1.8
12. NE mdblk	*	17	150	1.8
13. ES blk	*	600	-17	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-17	-600	1.8
20. NE blk	*	17	600	1.8

IV. MDDEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	279.	.7	*	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	*	164.	.9	*	.0	.0	.1	.0	.2	.0	.0	.0
3. SW	*	7.	.8	*	.0	.0	.0	.3	.0	.0	.1	.0
4. NE	*	262.	.8	*	.0	.1	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	275.	.3	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	103.	.7	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	76.	.6	*	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	*	265.	.3	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	348.	.7	.2	.0	.3	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.6	.0	.0	.0	.4	.0	.0	.0	.0	.0
11. SW mdblk	8.	.7	.0	.0	.0	.0	.4	.0	.0	.0	.0
12. NE mdblk	189.	.5	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	272.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	267.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	352.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. OEGREES
Z0= 100. CM
VO= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	9	-150	9	0	AG	942	1.3	.0	13.5
B. Bayshore NBO	9	0	9	150	AG	1351	1.0	.0	10.0
C. Bayshore NBL	5	-150	0	0	AG	113	1.6	.0	10.0
O. Bayshore SBA	-9	150	-9	0	AG	1616	1.6	.0	13.5
E. Bayshore SBD	-9	0	-9	-150	AG	1536	1.0	.0	10.0
F. Bayshore SBL	-5	150	0	0	AG	327	1.7	.0	10.0
G. Old Coun EBA	-150	-7	0	-7	AG	320	1.6	.0	10.0
H. Old Coun EBD	0	-7	150	-7	AG	533	1.6	.0	10.0
I. Old Coun EBL	-150	-5	0	0	AG	243	1.7	.0	10.0
J. Old Coun WBA	150	4	0	4	AG	494	1.7	.0	10.0
K. Old Coun WBO	0	4	-150	4	AG	665	1.6	.0	10.0
L. Old Coun WBL	150	2	0	0	AG	30	1.6	.0	10.0
M. Bayshor NBAX	9	-750	9	-150	AG	1055	.9	.0	13.5
N. Bayshor NBDX	9	150	9	750	AG	1351	.9	.0	10.0
O. Bayshor SBAX	-9	750	-9	150	AG	1943	.9	.0	13.5
P. Bayshor SBDX	-9	-150	-9	-750	AG	1536	.9	.0	10.0
Q. Old Cou EBAX	-750	-7	-150	-7	AG	563	.9	.0	10.0
R. Old Cou EBDX	150	-7	750	-7	AG	533	.9	.0	10.0
S. Old Cou WBAX	750	4	150	4	AG	524	.9	.0	10.0
T. Old Cou WBDX	-150	4	-750	4	AG	665	.9	.0	10.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	17	-14	1.8
2. NW	-17	10	1.8
3. SW	-15	-14	1.8
4. NE	15	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	15	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	17	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (OEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	349.	.4	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	9.	.5	.0	.0	.0	.3	.0	.0	.0	.0
3. SW	7.	.6	.0	.0	.0	.3	.0	.0	.0	.0
4. NE	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.3	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.5	.0	.0	.0	.3	.0	.0	.0	.0	.0
11. SW mdblk	6.	.4	.0	.0	.0	.0	.2	.0	.0	.0	.0
12. NE mdblk	190.	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tunnel A NBA	*	2	-150	2	0	* AG	576	1.3	.0	10.0
B. Tunnel A NBD	*	2	0	2	150	* AG	442	1.0	.0	10.0
C. Tunnel A NBL	*	2	-150	0	0	* AG	0	.9	.0	10.0
D. Tunnel A SBA	*	-19	150	-19	0	* AG	265	1.2	.0	10.0
E. Tunnel A SBD	*	-19	0	-19	-150	* AG	530	1.0	.0	10.0
F. Tunnel A SBL	*	-19	150	0	0	* AG	156	1.6	.0	10.0
G. Lagoon W EBA	*	-150	-2	0	-2	* AG	0	.9	.0	10.0
H. Lagoon W EBD	*	0	-2	150	-2	* AG	384	1.2	.0	10.0
I. Lagoon W EBL	*	-150	-2	0	0	* AG	0	.9	.0	10.0
J. Lagoon W WBA	*	150	0	0	0	* AG	94	1.5	.0	10.0
K. Lagoon W WBD	*	0	0	-150	0	* AG	0	.9	.0	10.0
L. Lagoon W WBL	*	150	2	0	0	* AG	265	1.7	.0	10.0
M. Tunnel NBAX	*	2	-750	2	-150	* AG	576	.9	.0	10.0
N. Tunnel NBDX	*	2	150	2	750	* AG	442	.9	.0	10.0
D. Tunnel SBAX	*	-19	750	-19	150	* AG	421	.9	.0	10.0
P. Tunnel SBDX	*	-19	-150	-19	-750	* AG	530	.9	.0	10.0
Q. Lagoon EBAX	*	-750	-2	-150	-2	* AG	0	.9	.0	10.0
R. Lagoon EBDX	*	150	-2	750	-2	* AG	384	.9	.0	10.0
S. Lagoon WBAX	*	750	0	150	0	* AG	359	.9	.0	10.0
T. Lagoon WBDX	*	-150	0	-750	0	* AG	0	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

III. RECEPTOR LDCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-26	7	1.8
3. SW	*	-26	-8	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-26	150	1.8
11. SW mdblk	*	-26	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-26	600	1.8
19. SW blk	*	-26	-600	1.8
20. NE blk	*	8	600	1.8

CALINE4: CALIFDRNIA LINE SDURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JDB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTDR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	350.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	95.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	85.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	188.	.2	*	.1	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	280.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	92.	.0	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	88.	.0	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	262.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	353.	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	90.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE) (CDNT.)

RECEPTOR	CDNC/LINK (PPM) I	J	K	L	M	N	D	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WDRST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Sierra P NBA	5	-150	5	0	AG	746	1.5	.0	10.0
B. Sierra P NBD	5	0	5	150	AG	915	1.3	.0	10.0
C. Sierra P NBL	5	-150	0	0	AG	234	1.7	.0	10.0
D. Sierra P SBA	-4	150	-4	0	AG	605	1.4	.0	10.0
E. Sierra P SBD	-4	0	-4	-150	AG	305	1.0	.0	10.0
F. Sierra P SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Lagoond EBA	-150	-5	0	-5	AG	180	1.5	.0	10.0
H. Lagoond EBD	0	-5	150	-5	AG	0	.9	.0	10.0
I. Lagoond EBL	-150	-5	0	0	AG	169	1.6	.0	10.0
J. Lagoond WBA	150	0	0	0	AG	0	.9	.0	10.0
K. Lagoond WBD	0	0	-150	0	AG	714	1.7	.0	10.0
L. Lagoond WBL	150	2	0	0	AG	0	.9	.0	10.0
M. Sierra NBAX	5	-750	5	-150	AG	980	.9	.0	10.0
N. Sierra NBDX	5	150	5	750	AG	915	.9	.0	10.0
O. Sierra SBAX	-4	750	-4	150	AG	605	.9	.0	10.0
P. Sierra SBDX	-4	-150	-4	-750	AG	305	.9	.0	10.0
Q. Lagoond EBAX	-750	-5	-150	-5	AG	349	.9	.0	10.0
R. Lagoond EBDX	150	-5	750	-5	AG	0	.9	.0	10.0
S. Lagoond WBAX	750	0	150	0	AG	0	.9	.0	10.0
T. Lagoond WBDX	-150	0	-750	0	AG	714	.9	.0	10.0

□□

CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSIDN
PAGE 2

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	12	-12	1.8
2. NW	-10	7	1.8
3. SW	-10	-12	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	12	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	7	1.8
17. SE blk	12	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	12	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (OEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	170.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	7.	.3	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	263.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	272.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	100.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	78.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	268.	.1	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.3	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.2	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	188.	.3	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	271.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SDURCE DISPERSIDN MDDEL
JUNE 1989 VERSIDN
PAGE 1

JOB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. US 101 N NBA	*	4	-150	4	0	* AG	282	1.5	.0	10.0
B. US 101 N NBD	*	4	0	4	150	* AG	354	1.2	.0	10.0
C. US 101 N NBL	*	2	-150	0	0	* AG	53	1.6	.0	10.0
D. US 101 N SBA	*	0	150	0	0	* AG	0	.9	.0	10.0
E. US 101 N SBD	*	0	0	0	-150	* AG	0	.9	.0	10.0
F. US 101 N SBL	*	-2	150	0	0	* AG	0	.9	.0	10.0
G. Sierra P EBA	*	-150	-5	0	-5	* AG	213	1.3	.0	10.0
H. Sierra P EBD	*	0	-5	150	-5	* AG	495	1.0	.0	10.0
I. Sierra P EBL	*	-150	-5	0	0	* AG	90	1.6	.0	10.0
J. Sierra P WBA	*	150	4	0	4	* AG	698	1.4	.0	10.0
K. Sierra P WBD	*	0	4	-150	4	* AG	487	1.0	.0	10.0
L. Sierra P WBL	*	150	2	0	0	* AG	0	.9	.0	10.0
M. US 101 NBAX	*	4	-750	4	-150	* AG	335	.9	.0	10.0
N. US 101 NBDX	*	4	150	4	750	* AG	354	.9	.0	10.0
D. US 101 SBAX	*	0	750	0	150	* AG	0	.9	.0	10.0
P. US 101 SBDX	*	0	-150	0	-750	* AG	0	.9	.0	10.0
Q. Sierra EBAX	*	-750	-5	-150	-5	* AG	303	.9	.0	10.0
R. Sierra EBDX	*	150	-5	750	-5	* AG	495	.9	.0	10.0
S. Sierra WBAX	*	750	4	150	4	* AG	698	.9	.0	10.0
T. Sierra WBDX	*	-150	4	-750	4	* AG	487	.9	.0	10.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 2

JDB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTDR LDCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	10	-12	1.8
2. NW	*	-7	10	1.8
3. SW	*	-7	-12	1.8
4. NE	*	10	10	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	10	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	10	1.8
9. SE mdblk	*	10	-150	1.8
10. NW mdblk	*	-7	150	1.8
11. SW mdblk	*	-7	-150	1.8
12. NE mdblk	*	10	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	10	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	10	1.8
17. SE blk	*	10	-600	1.8
18. NW blk	*	-7	600	1.8
19. SW blk	*	-7	-600	1.8
20. NE blk	*	10	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CDNC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	82.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	97.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	83.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	97.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	278.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	96.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	84.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	262.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

	CONC/LINK (PPM)											
RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Sierra Point
RUN: Cumulative N (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WDRST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Shorelin NBA	5	-150	5	0	AG	11	1.3	.0	11.8
B. Shorelin NBD	5	0	5	150	AG	49	1.0	.0	10.0
C. Shorelin NBL	2	-150	0	0	AG	482	1.7	.0	10.0
D. Shorelin SBA	-5	150	-5	0	AG	570	1.4	.0	11.8
E. Shorelin SBD	-5	0	-5	-150	AG	128	1.0	.0	10.0
F. Shorelin SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Sierra P EBA	-150	-9	0	-9	AG	200	1.3	.0	13.5
H. Sierra P EBD	0	-9	150	-9	AG	80	1.0	.0	10.0
I. Sierra P EBL	-150	-5	0	0	AG	36	1.6	.0	10.0
J. Sierra P WBA	150	9	0	9	AG	337	1.3	.0	13.5
K. Sierra P WBD	0	9	-150	9	AG	1383	1.1	.0	10.0
L. Sierra P WBL	150	5	0	0	AG	4	1.6	.0	10.0
M. Shoreli NBAX	5	-750	5	-150	AG	493	.9	.0	11.8
N. Shoreli NBDX	5	150	5	750	AG	49	.9	.0	10.0
O. Shoreli SBAX	-5	750	-5	150	AG	570	.9	.0	11.8
P. Shoreli SBDX	-5	-150	-5	-750	AG	128	.9	.0	10.0
Q. Sierra EBAX	-750	-9	-150	-9	AG	236	.9	.0	13.5
R. Sierra EBDX	150	-9	750	-9	AG	80	.9	.0	10.0
S. Sierra WBAX	750	9	150	9	AG	341	.9	.0	13.5
T. Sierra WBDX	-150	9	-750	9	AG	1383	.9	.0	10.0

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	13	-15	1.8
2. NW	-13	15	1.8
3. SW	-12	-17	1.8
4. NE	12	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-13	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	13	-600	1.8
18. NW blk	-13	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	12	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (OEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	170.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	99.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	76.	.1	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.1	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	351.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.2	.0	.0	.0	.1	.0	.0	.0	.0	.0
11. SW mdblk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative N (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WDRST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	9	-150	9	0	* AG	754	1.7	.0	13.5
B. Bayshore NBD	*	9	0	9	150	* AG	681	1.6	.0	10.0
C. Bayshore NBL	*	5	-150	0	0	* AG	36	1.6	.0	10.0
D. Bayshore SBA	*	-12	150	-12	0	* AG	1660	1.7	.0	13.5
E. Bayshore SBD	*	-12	0	-12	-150	* AG	1111	1.6	.0	10.0
F. Bayshore SBL	*	-9	150	0	0	* AG	373	1.6	.0	10.0
G. Oyster P EBA	*	-150	-9	0	-9	* AG	87	1.2	.0	13.5
H. Dyster P EBD	*	0	-9	150	-9	* AG	648	1.0	.0	11.8
I. Oyster P EBL	*	-150	-5	0	0	* AG	75	1.6	.0	10.0
J. Dyster P WBA	*	150	11	0	11	* AG	393	1.2	.0	10.0
K. Oyster P WBD	*	0	11	-150	11	* AG	989	1.0	.0	10.0
L. Oyster P WBL	*	150	9	0	0	* AG	51	1.6	.0	10.0
M. Bayshor NBAX	*	9	-750	9	-150	* AG	790	.9	.0	13.5
N. Bayshor NBDX	*	9	150	9	750	* AG	681	.9	.0	10.0
O. Bayshor SBAX	*	-12	750	-12	150	* AG	2033	.9	.0	13.5
P. Bayshor SBDX	*	-12	-150	-12	-750	* AG	1111	.9	.0	10.0
Q. Oyster EBAX	*	-750	-9	-150	-9	* AG	162	.9	.0	13.5
R. Oyster EBDX	*	150	-9	750	-9	* AG	648	.9	.0	11.8
S. Oyster WBAX	*	750	11	150	11	* AG	444	.9	.0	10.0
T. Oyster WBDX	*	-150	11	-750	11	* AG	989	.9	.0	10.0

CALINE4: CALIFORNIA LINE SDURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-16	1.8
2. NW	*	-21	17	1.8
3. SW	*	-19	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	17	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-19	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	17	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-19	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	347.	.4	*	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	*	10.	.4	*	.0	.0	.0	.3	.0	.0	.0	.0
3. SW	*	7.	.5	*	.0	.0	.0	.3	.0	.0	.0	.0
4. NE	*	263.	.3	*	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	278.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	97.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	81.	.1	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	264.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.5	.0	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	7.	.4	.0	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	190.	.3	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VO= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK OESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Congdon NBA	7	-150	7	0	AG	193	1.5	.0	10.0
B. Congdon NBO	7	0	7	150	AG	40	1.0	.0	10.0
C. Congdon NBL	5	-150	0	0	AG	5	1.6	.0	10.0
D. Congdon SBA	-5	150	-5	0	AG	230	1.5	.0	10.0
E. Congdon SBO	-5	0	-5	-150	AG	278	1.1	.0	10.0
F. Congdon SBL	-5	150	0	0	AG	111	1.6	.0	10.0
G. Alemany EBA	-150	-5	0	-5	AG	533	1.2	.0	13.5
H. Alemany EBD	0	-5	150	-5	AG	770	1.0	.0	11.8
I. Alemany EBL	-150	-2	0	0	AG	0	.9	.0	10.0
J. Alemany WBA	150	11	0	11	AG	1236	1.4	.0	10.0
K. Alemany WBO	0	11	-150	11	AG	1220	1.0	.0	10.0
L. Alemany WBL	150	9	0	0	AG	0	.9	.0	10.0
M. Congdon NBAX	7	-750	7	-150	AG	198	.9	.0	10.0
N. Congdon NBDX	7	150	7	750	AG	40	.9	.0	10.0
O. Congdon SBAX	-5	750	-5	150	AG	341	.9	.0	10.0
P. Congdon SBDX	-5	-150	-5	-750	AG	278	.9	.0	10.0
Q. Alemany EBAX	-750	-5	-150	-5	AG	533	.9	.0	13.5
R. Alemany EBDX	150	-5	750	-5	AG	770	.9	.0	11.8
S. Alemany WBAX	750	11	150	11	AG	1236	.9	.0	10.0
T. Alemany WBOX	-150	11	-750	11	AG	1220	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-13	1.8
2. NW	-12	17	1.8
3. SW	-12	-14	1.8
4. NE	14	17	1.8
5. ES mdblk	150	-13	1.8
6. WN mdblk	-150	17	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-13	1.8
14. WN blk	-600	17	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	17	1.8
17. SE blk	14	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	14	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTDR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	81.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	98.	.3	.0	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	279.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	353.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTDR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S ZO= 100. CM ALT= 3. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Alemany NBA	*	7	-150	7	0	* AG	751	1.6	.0	10.0
B. Alemany NBD	*	7	0	7	150	* AG	892	1.4	.0	10.0
C. Alemany NBL	*	5	-150	0	0	* AG	73	1.6	.0	10.0
D. Alemany SBA	*	-7	150	-7	0	* AG	1191	1.7	.0	10.0
E. Alemany SBD	*	-7	0	-7	-150	* AG	1556	1.7	.0	10.0
F. Alemany SBL	*	-5	150	0	0	* AG	348	1.7	.0	10.0
G. Geneva A EBA	*	-150	-7	0	-7	* AG	1014	1.3	.0	10.0
H. Geneva A EBD	*	0	-7	150	-7	* AG	1583	1.0	.0	10.0
I. Geneva A EBL	*	-150	-5	0	0	* AG	214	1.7	.0	10.0
J. Geneva A WBA	*	150	4	0	4	* AG	1170	1.3	.0	11.8
K. Geneva A WBD	*	0	4	-150	4	* AG	1138	1.0	.0	10.0
L. Geneva A WBL	*	150	2	0	0	* AG	408	1.7	.0	10.0
M. Alemany NBAX	*	7	-750	7	-150	* AG	824	.9	.0	10.0
N. Alemany NBDX	*	7	150	7	750	* AG	892	.9	.0	10.0
O. Alemany SBAX	*	-7	750	-7	150	* AG	1539	.9	.0	10.0
P. Alemany SBDX	*	-7	-150	-7	-750	* AG	1556	.9	.0	10.0
Q. Geneva EBAX	*	-750	-7	-150	-7	* AG	1228	.9	.0	10.0
R. Geneva EBDX	*	150	-7	750	-7	* AG	1583	.9	.0	10.0
S. Geneva WBAX	*	750	4	150	4	* AG	1578	.9	.0	11.8
T. Geneva WBDX	*	-150	4	-750	4	* AG	1138	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSIDN
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTDR LDCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-14	1.8
2. NW	*	-14	10	1.8
3. SW	*	-14	-14	1.8
4. NE	*	14	11	1.8
5. ES mdblk	*	150	-14	1.8
6. WN mdblk	*	-150	10	1.8
7. WS mdblk	*	-150	-14	1.8
8. EN mdblk	*	150	11	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-14	1.8
14. WN blk	*	-600	10	1.8
15. WS blk	*	-600	-14	1.8
16. EN blk	*	600	11	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 3

JDB: Sierra Point
RUN: Cumulative W (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	349.	* .5	*	.0	.1	.0	.0	.0	.0	.0	.1
2. NW	*	98.	* .6	*	.0	.0	.0	.1	.0	.0	.0	.0
3. SW	*	82.	* .6	*	.0	.0	.0	.0	.2	.0	.0	.2
4. NE	*	190.	* .5	*	.1	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	278.	* .4	*	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	*	96.	* .4	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	83.	* .4	*	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	*	262.	* .5	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.5	.0	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.5	.0	.0	.0	.0	.3	.0	.0	.0	.0
12. NE mdblk	188.	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission NBA	2	-150	2	0	AG	1228	1.6	.0	10.0
B. Mission NBD	2	0	2	150	AG	1199	1.0	.0	10.0
C. Mission NBL	2	-150	0	0	AG	160	1.6	.0	10.0
D. Mission SBA	-4	150	-4	0	AG	2152	1.7	.0	10.0
E. Mission SBD	-4	0	-4	-150	AG	2548	1.5	.0	10.0
F. Mission SBL	-2	150	0	0	AG	143	1.6	.0	10.0
G. Geneva A EBA	-150	-7	0	-7	AG	1924	1.7	.0	10.0
H. Geneva A EBD	0	-7	150	-7	AG	1666	1.4	.0	10.0
I. Geneva A EBL	-150	-5	0	0	AG	9	1.6	.0	10.0
J. Geneva A WBA	150	7	0	7	AG	1695	1.7	.0	10.0
K. Geneva A WBD	0	7	-150	7	AG	1916	1.5	.0	10.0
L. Geneva A WBL	150	5	0	0	AG	18	1.6	.0	10.0
M. Mission NBAX	2	-750	2	-150	AG	1388	.9	.0	10.0
N. Mission NBDX	2	150	2	750	AG	1199	.9	.0	10.0
O. Mission SBAX	-4	750	-4	150	AG	2295	.9	.0	10.0
P. Mission SBDX	-4	-150	-4	-750	AG	2548	.9	.0	10.0
Q. Geneva EBAX	-750	-7	-150	-7	AG	1933	.9	.0	10.0
R. Geneva EBDX	150	-7	750	-7	AG	1666	.9	.0	10.0
S. Geneva WBAX	750	7	150	7	AG	1713	.9	.0	10.0
T. Geneva WBDX	-150	7	-750	7	AG	1916	.9	.0	10.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

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CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	BRG (DEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	279.	.9	.1	.0	.0	.0	.2	.0	.4	.0
2. NW	171.	1.0	.1	.0	.0	.1	.4	.0	.1	.0
3. SW	9.	.9	.0	.0	.0	.4	.1	.0	.2	.0
4. NE	189.	.8	.2	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	99.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	82.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.7	.3	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	173.	.7	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	.8	.1	.0	.0	.0	.5	.0	.0	.0
12. NE mdblk	187.	.6	.0	.2	.0	.2	.0	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 OEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	11	-150	11	0	AG	1075	1.3	.0	10.0
B. Bayshore NBD	11	0	11	150	AG	1725	1.1	.0	10.0
C. Bayshore NBL	9	-150	0	0	AG	1497	1.7	.0	10.0
D. Bayshore SBA	-11	150	-11	0	AG	2318	1.6	.0	17.0
E. Bayshore SBD	-11	0	-11	-150	AG	2579	1.3	.0	10.0
F. Bayshore SBL	-5	150	0	0	AG	87	1.6	.0	10.0
G. Geneva A EBA	-150	-11	0	-11	AG	1044	1.7	.0	10.0
H. Geneva A EBD	0	-11	150	-11	AG	89	1.0	.0	10.0
I. Geneva A EBL	-150	-9	0	0	AG	592	1.7	.0	10.0
J. Geneva A WBA	150	7	0	7	AG	122	1.5	.0	10.0
K. Geneva A WBD	0	7	-150	7	AG	2466	1.7	.0	10.0
L. Geneva A WBL	150	5	0	0	AG	124	1.6	.0	10.0
M. Bayshor NBAX	11	-750	11	-150	AG	2572	.9	.0	10.0
N. Bayshor NBDX	11	150	11	750	AG	1725	.9	.0	10.0
O. Bayshor SBAX	-11	750	-11	150	AG	2405	.9	.0	17.0
P. Bayshor SBDX	-11	-150	-11	-750	AG	2579	.9	.0	10.0
Q. Geneva EBAX	-750	-11	-150	-11	AG	1636	.9	.0	10.0
R. Geneva EBDX	150	-11	750	-11	AG	89	.9	.0	10.0
S. Geneva WBAX	750	7	150	7	AG	246	.9	.0	10.0
T. Geneva WBDX	-150	7	-750	7	AG	2466	.9	.0	10.0

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-17	1.8
2. NW	-21	14	1.8
3. SW	-17	-17	1.8
4. NE	17	14	1.8
5. ES mdblk	150	-17	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-21	150	1.8
11. SW mdblk	-17	-150	1.8
12. NE mdblk	17	150	1.8
13. ES blk	600	-17	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	14	1.8
17. SE blk	17	-600	1.8
18. NW blk	-21	600	1.8
19. SW blk	-17	-600	1.8
20. NE blk	17	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	279.	.7	.0	.0	.1	.0	.0	.0	.2	.0
2. NW	164.	.9	.0	.0	.1	.0	.2	.0	.0	.0
3. SW	7.	.8	.0	.0	.0	.3	.1	.0	.1	.0
4. NE	262.	.8	.0	.1	.0	.1	.0	.0	.0	.0
5. ES mdblk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	103.	.7	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	76.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	348.	.7	.2	.0	.3	.0	.0	.0	.0	.0
10. NW mdblk	172.	.6	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	.7	.0	.0	.0	.4	.0	.0	.0	.0
12. NE mdblk	189.	.5	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	273.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	267.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	352.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	188.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S ZO= 100. CM ALT= 3. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 OEGREE (C)

II. LINK VARIABLES

LINK OESCRIPTION	LINK COOROINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	9	-150	9	0	AG	942	1.3	.0	13.5
B. Bayshore NBO	9	0	9	150	AG	1366	1.0	.0	10.0
C. Bayshore NBL	5	-150	0	0	AG	108	1.6	.0	10.0
O. Bayshore SBA	-9	150	-9	0	AG	1624	1.6	.0	13.5
E. Bayshore SBD	-9	0	-9	-150	AG	1537	1.0	.0	10.0
F. Bayshore SBL	-5	150	0	0	AG	350	1.7	.0	10.0
G. Old Coun EBA	-150	-7	0	-7	AG	320	1.6	.0	10.0
H. Old Coun EBD	0	-7	150	-7	AG	562	1.6	.0	10.0
I. Old Coun EBL	-150	-5	0	0	AG	246	1.7	.0	10.0
J. Old Coun WBA	150	4	0	4	AG	514	1.7	.0	10.0
K. Old Coun WBO	0	4	-150	4	AG	670	1.6	.0	10.0
L. Old Coun WBL	150	2	0	0	AG	31	1.6	.0	10.0
M. Bayshor NBAX	9	-750	9	-150	AG	1050	.9	.0	13.5
N. Bayshor NBDX	9	150	9	750	AG	1366	.9	.0	10.0
O. Bayshor SBAX	-9	750	-9	150	AG	1974	.9	.0	13.5
P. Bayshor SBOX	-9	-150	-9	-750	AG	1537	.9	.0	10.0
Q. Old Cou EBAX	-750	-7	-150	-7	AG	566	.9	.0	10.0
R. Old Cou EBDX	150	-7	750	-7	AG	562	.9	.0	10.0
S. Old Cou WBAX	750	4	150	4	AG	545	.9	.0	10.0
T. Old Cou WBDX	-150	4	-750	4	AG	670	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	17	-14	1.8
2. NW	-17	10	1.8
3. SW	-15	-14	1.8
4. NE	15	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	15	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	17	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	15	600	1.8

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	BRG (DEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	349.	.4	.0	.1	.0	.0	.0	.0	.0	.0
2. NW	9.	.5	.0	.0	.0	.3	.0	.0	.0	.0
3. SW	7.	.6	.0	.0	.0	.3	.0	.0	.0	.0
4. NE	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.3	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.3	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.5	.0	.0	.0	.3	.0	.0	.0	.0	.0
11. SW mdblk	6.	.4	.0	.0	.0	.0	.2	.0	.0	.0	.0
12. NE mdblk	190.	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTIDN	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tunnel A NBA	*	2	-150	2	0	* AG	605	1.4	.0	10.0
B. Tunnel A NBD	*	2	0	2	150	* AG	450	1.0	.0	10.0
C. Tunnel A NBL	*	2	-150	0	0	* AG	0	.9	.0	10.0
D. Tunnel A SBA	*	-19	150	-19	0	* AG	263	1.2	.0	10.0
E. Tunnel A SBD	*	-19	0	-19	-150	* AG	552	1.0	.0	10.0
F. Tunnel A SBL	*	-19	150	0	0	* AG	166	1.6	.0	10.0
G. Lagoon W EBA	*	-150	-2	0	-2	* AG	0	.9	.0	10.0
H. Lagoon W EBD	*	0	-2	150	-2	* AG	420	1.4	.0	10.0
I. Lagoon W EBL	*	-150	-2	0	0	* AG	0	.9	.0	10.0
J. Lagoon W WBA	*	150	0	0	0	* AG	99	1.5	.0	10.0
K. Lagoon W WBD	*	0	0	-150	0	* AG	0	.9	.0	10.0
L. Lagoon W WBL	*	150	2	0	0	* AG	289	1.7	.0	10.0
M. Tunnel NBAX	*	2	-750	2	-150	* AG	605	.9	.0	10.0
N. Tunnel NBDX	*	2	150	2	750	* AG	450	.9	.0	10.0
D. Tunnel SBAX	*	-19	750	-19	150	* AG	429	.9	.0	10.0
P. Tunnel SBDX	*	-19	-150	-19	-750	* AG	552	.9	.0	10.0
Q. Lagoon EBAX	*	-750	-2	-150	-2	* AG	0	.9	.0	10.0
R. Lagoon EBDX	*	150	-2	750	-2	* AG	420	.9	.0	10.0
S. Lagoon WBAX	*	750	0	150	0	* AG	388	.9	.0	10.0
T. Lagoon WBDX	*	-150	0	-750	0	* AG	0	.9	.0	10.0

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-8	1.8
2. NW	*	-26	7	1.8
3. SW	*	-26	-8	1.8
4. NE	*	8	7	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-26	150	1.8
11. SW mdblk	*	-26	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-26	600	1.8
19. SW blk	*	-26	-600	1.8
20. NE blk	*	8	600	1.8

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 3

JDB: Sierra Point
RUN: Cumulative W (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE)

RECEPTDR	*	BRG * (DEG)	PRED * CONC * (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	349.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	95.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	85.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	188.	.2	*	.1	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	280.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	92.	.0	*	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	88.	.0	*	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	262.	.2	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	353.	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	90.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0

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CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. OEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COOROINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Sierra P NBA	5	-150	5	0	AG	1079	1.6	.0	10.0
B. Sierra P NBD	5	0	5	150	AG	1234	1.3	.0	10.0
C. Sierra P NBL	5	-150	0	0	AG	271	1.7	.0	10.0
D. Sierra P SBA	-4	150	-4	0	AG	728	1.5	.0	10.0
E. Sierra P SBD	-4	0	-4	-150	AG	468	1.0	.0	10.0
F. Sierra P SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Lagoond EBA	-150	-5	0	-5	AG	236	1.5	.0	10.0
H. Lagoond EBD	0	-5	150	-5	AG	0	.9	.0	10.0
I. Lagoond EBL	-150	-5	0	0	AG	155	1.6	.0	10.0
J. Lagoond WBA	150	0	0	0	AG	0	.9	.0	10.0
K. Lagoond WBD	0	0	-150	0	AG	767	1.7	.0	10.0
L. Lagoond WBL	150	2	0	0	AG	0	.9	.0	10.0
M. Sierra NBAX	5	-750	5	-150	AG	1350	.9	.0	10.0
N. Sierra NBOX	5	150	5	750	AG	1234	.9	.0	10.0
O. Sierra SBAX	-4	750	-4	150	AG	728	.9	.0	10.0
P. Sierra SBDX	-4	-150	-4	-750	AG	468	.9	.0	10.0
Q. Lagoond EBAX	-750	-5	-150	-5	AG	391	.9	.0	10.0
R. Lagoond EBDX	150	-5	750	-5	AG	0	.9	.0	10.0
S. Lagoond WBAX	750	0	150	0	AG	0	.9	.0	10.0
T. Lagoond WBOX	-150	0	-750	0	AG	767	.9	.0	10.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	12	-12	1.8
2. NW	-10	7	1.8
3. SW	-10	-12	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	12	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	7	1.8
17. SE blk	12	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	12	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	BRG (OEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.4	.1	.0	.0	.0	.0	.0	.0	.0
2. NW	170.	.4	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	8.	.4	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	263.	.4	.0	.1	.0	.0	.0	.0	.0	.0
5. ES mdblk	272.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	100.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	78.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	268.	.1	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	352.	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.3	.0	.0	.0	.2	.0	.0	.0	.0	.0
11. SW mdblk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	188.	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	271.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	269.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. US 101 N NBA	4	-150	4	0	AG	398	1.6	.0	10.0
B. US 101 N NBD	4	0	4	150	AG	800	1.7	.0	10.0
C. US 101 N NBL	2	-150	0	0	AG	45	1.6	.0	10.0
D. US 101 N SBA	0	150	0	0	AG	0	.9	.0	10.0
E. US 101 N SBD	0	0	0	-150	AG	0	.9	.0	10.0
F. US 101 N SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Sierra P EBA	-150	-5	0	-5	AG	106	1.2	.0	10.0
H. Sierra P EBD	0	-5	150	-5	AG	504	1.0	.0	10.0
I. Sierra P EBL	-150	-5	0	0	AG	364	1.7	.0	10.0
J. Sierra P WBA	150	4	0	4	AG	1063	1.6	.0	10.0
K. Sierra P WBD	0	4	-150	4	AG	672	1.0	.0	10.0
L. Sierra P WBL	150	2	0	0	AG	0	.9	.0	10.0
M. US 101 NBAX	4	-750	4	-150	AG	443	.9	.0	10.0
N. US 101 NBDX	4	150	4	750	AG	800	.9	.0	10.0
O. US 101 SBAX	0	750	0	150	AG	0	.9	.0	10.0
P. US 101 SBDX	0	-150	0	-750	AG	0	.9	.0	10.0
Q. Sierra EBAX	-750	-5	-150	-5	AG	470	.9	.0	10.0
R. Sierra EBDX	150	-5	750	-5	AG	504	.9	.0	10.0
S. Sierra WBAX	750	4	150	4	AG	1063	.9	.0	10.0
T. Sierra WBDX	-150	4	-750	4	AG	672	.9	.0	10.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTDR	COORDINATES (M) X	Y	Z
1. SE	10	-12	1.8
2. NW	-7	10	1.8
3. SW	-7	-12	1.8
4. NE	10	10	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	10	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	10	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	10	1.8
17. SE blk	10	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	10	600	1.8

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE)

RECEPTDR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.3	.0	.2	.0	.0	.0	.0	.0	.0
2. NW	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	260.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	188.	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WDRST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTDR	CONC/LINK (PPM) I	J	K	L	M	N	D	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MDDEL
JUNE 1989 VERSIDN
PAGE 1

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	ZO=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Shorelin NBA	5	-150	5	0	AG	17	1.3	.0	11.8
B. Shorelin NBD	5	0	5	150	AG	77	1.0	.0	10.0
C. Shorelin NBL	2	-150	0	0	AG	738	1.7	.0	10.0
D. Shorelin SBA	-5	150	-5	0	AG	874	1.4	.0	11.8
E. Shorelin SBD	-5	0	-5	-150	AG	201	1.0	.0	10.0
F. Shorelin SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Sierra P EBA	-150	-9	0	-9	AG	314	1.3	.0	13.5
H. Sierra P EBD	0	-9	150	-9	AG	127	1.0	.0	10.0
I. Sierra P EBL	-150	-5	0	0	AG	56	1.6	.0	10.0
J. Sierra P WBA	150	9	0	9	AG	520	1.4	.0	13.5
K. Sierra P WBD	0	9	-150	9	AG	2122	1.5	.0	10.0
L. Sierra P WBL	150	5	0	0	AG	8	1.6	.0	10.0
M. Shoreli NBAX	5	-750	5	-150	AG	755	.9	.0	11.8
N. Shoreli NBDX	5	150	5	750	AG	77	.9	.0	10.0
D. Shoreli SBAX	-5	750	-5	150	AG	874	.9	.0	11.8
P. Shoreli SBDX	-5	-150	-5	-750	AG	201	.9	.0	10.0
Q. Sierra EBAX	-750	-9	-150	-9	AG	370	.9	.0	13.5
R. Sierra EBDX	150	-9	750	-9	AG	127	.9	.0	10.0
S. Sierra WBAX	750	9	150	9	AG	528	.9	.0	13.5
T. Sierra WBDX	-150	9	-750	9	AG	2122	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 2

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-15	1.8
2. NW	-13	15	1.8
3. SW	-12	-17	1.8
4. NE	12	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-13	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	13	-600	1.8
18. NW blk	-13	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (OEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	280.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	261.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	5.	.3	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	261.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	100.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	75.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	351.	.2	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	174.	.2	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	188.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Cumulative W (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	ZO=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VO=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK OESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	9	-150	9	0	* AG	332	11.5	.0	13.5
B. Bayshore NBO	*	9	0	9	150	* AG	318	7.3	.0	10.0
C. Bayshore NBL	*	5	-150	0	0	* AG	35	11.2	.0	10.0
O. Bayshore SBA	*	-12	150	-12	0	* AG	840	12.1	.0	13.5
E. Bayshore SBD	*	-12	0	-12	-150	* AG	688	7.3	.0	10.0
F. Bayshore SBL	*	-9	150	0	0	* AG	160	11.2	.0	10.0
G. Oyster P EBA	*	-150	-9	0	-9	* AG	752	8.2	.0	13.5
H. Oyster P EBD	*	0	-9	150	-9	* AG	1093	5.9	.0	11.8
I. Oyster P EBL	*	-150	-5	0	0	* AG	157	11.2	.0	10.0
J. Oyster P WBA	*	150	11	0	11	* AG	345	8.1	.0	10.0
K. Oyster P WBO	*	0	11	-150	11	* AG	585	5.8	.0	10.0
L. Oyster P WBL	*	150	9	0	0	* AG	63	11.2	.0	10.0
M. Bayshor NBAX	*	9	-750	9	-150	* AG	367	5.6	.0	13.5
N. Bayshor NBOX	*	9	150	9	750	* AG	318	5.6	.0	10.0
O. Bayshor SBAX	*	-12	750	-12	150	* AG	1000	5.6	.0	13.5
P. Bayshor SBOX	*	-12	-150	-12	-750	* AG	688	5.6	.0	10.0
Q. Oyster EBAX	*	-750	-9	-150	-9	* AG	909	5.6	.0	13.5
R. Oyster EBOX	*	150	-9	750	-9	* AG	1093	5.6	.0	11.8
S. Oyster WBAX	*	750	11	150	11	* AG	408	5.6	.0	10.0
T. Oyster WBOX	*	-150	11	-750	11	* AG	585	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COOROINATES (M) X	Y	Z
1. SE	*	17	-16	1.8
2. NW	*	-21	17	1.8
3. SW	*	-19	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	17	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-19	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	17	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-19	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	278.	* 1.7	*	.2	.0	.0	.0	.2	.0	.7	.2
2. NW	*	98.	* 1.7	*	.0	.0	.0	.6	.0	.0	.0	.2
3. SW	*	7.	* 2.2	*	.0	.0	.0	1.1	.2	.1	.4	.0
4. NE	*	261.	* 1.6	*	.0	.2	.0	.3	.0	.0	.2	.0
5. ES mdblk	*	277.	* 1.5	*	.0	.0	.0	.0	.0	.0	.1	.8
6. WN mdblk	*	98.	* 1.3	*	.0	.0	.0	.0	.0	.0	.1	.2
7. WS mdblk	*	82.	* 1.5	*	.0	.0	.0	.0	.0	.0	.8	.0
8. EN mdblk	*	263.	* 1.2	*	.0	.0	.0	.0	.0	.0	.2	.1

9. SE mdblk	352.	1.3	.5	.0	.0	.3	.0	.0	.0	.0
10. NW mdblk	171.	2.0	.1	.0	.0	1.3	.0	.1	.0	.0
11. SW mdblk	6.	1.4	.0	.0	.0	.2	.7	.0	.0	.0
12. NE mdblk	191.	1.2	.0	.4	.0	.3	.1	.1	.0	.0
13. ES blk	276.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.9	.0	.0	.0	.0	.0	.0	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
2. NW	.0	.3	.1	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0
4. NE	.1	.0	.4	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.5	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.1	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.5
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.4	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.6	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.0

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Congdon NBA	7	-150	7	0	AG	282	10.7	.0	10.0
B. Congdon NBD	7	0	7	150	AG	142	6.4	.0	10.0
C. Congdon NBL	5	-150	0	0	AG	140	11.2	.0	10.0
D. Congdon SBA	-5	150	-5	0	AG	490	12.1	.0	10.0
E. Congdon SBD	-5	0	-5	-150	AG	466	9.6	.0	10.0
F. Congdon SBL	-5	150	0	0	AG	230	12.1	.0	10.0
G. Alemany EBA	-150	-5	0	-5	AG	820	8.2	.0	13.5
H. Alemany EBD	0	-5	150	-5	AG	1256	5.9	.0	11.8
I. Alemany EBL	-150	-2	0	0	AG	0	5.6	.0	10.0
J. Alemany WBA	150	11	0	11	AG	755	8.5	.0	10.0
K. Alemany WBD	0	11	-150	11	AG	853	5.9	.0	10.0
L. Alemany WBL	150	9	0	0	AG	0	5.6	.0	10.0
M. Congdon NBAX	7	-750	7	-150	AG	422	5.6	.0	10.0
N. Congdon NBDX	7	150	7	750	AG	142	5.6	.0	10.0
D. Congdon SBAX	-5	750	-5	150	AG	720	5.6	.0	10.0
P. Congdon SBDX	-5	-150	-5	-750	AG	466	5.6	.0	10.0
Q. Alemany EBAX	-750	-5	-150	-5	AG	820	5.6	.0	13.5
R. Alemany EBDX	150	-5	750	-5	AG	1256	5.6	.0	11.8
S. Alemany WBAX	750	11	150	11	AG	755	5.6	.0	10.0
T. Alemany WBDX	-150	11	-750	11	AG	853	5.6	.0	10.0

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-13	1.8
2. NW	-12	17	1.8
3. SW	-12	-14	1.8
4. NE	14	17	1.8
5. ES mdblk	150	-13	1.8
6. WN mdblk	-150	17	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-13	1.8
14. WN blk	-600	17	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	17	1.8
17. SE blk	14	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	14	600	1.8

□□

CALINE4: CALIFORNIA LINE SDURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.8	.2	.0	.0	.0	.2	.0	.8	.2
2. NW	98.	2.0	.0	.0	.0	.4	.0	.1	.0	.2
3. SW	82.	1.9	.1	.0	.0	.0	.3	.0	.1	.8
4. NE	262.	1.7	.0	.0	.0	.2	.0	.1	.2	.0
5. ES mdblk	278.	1.7	.0	.0	.0	.0	.0	.0	.0	1.0
6. WN mdblk	97.	1.5	.0	.0	.0	.0	.0	.0	.2	.2
7. WS mdblk	83.	1.6	.0	.0	.0	.0	.0	.0	.8	.1
8. EN mdblk	262.	1.6	.0	.0	.0	.0	.0	.0	.2	.2

9. SE mdblk	352.	1.4	.5	.0	.2	.1	.2	.0	.0	.0
10. NW mdblk	172.	1.8	.0	.0	.0	.9	.0	.4	.0	.0
11. SW mdblk	7.	1.4	.1	.0	.1	.0	.6	.0	.0	.0
12. NE mdblk	187.	1.0	.0	.2	.0	.2	.1	.2	.0	.0
13. ES blk	277.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.7	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CDNT.)

RECEPTDR	CONC/LINK (PPM) I	J	K	L	M	N	D	P	Q	R	S	T
1. SE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.0	.8	.1	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
4. NE	.0	.2	.6	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.7	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.3	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.8
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.7	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.4	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0

□□

CALINE4: CALIFDRNIA LINE SDURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTIDN	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Alemany NBA	*	7	-150	7	0	* AG	602	11.5	.0	10.0
B. Alemany NBD	*	7	0	7	150	* AG	606	7.3	.0	10.0
C. Alemany NBL	*	5	-150	0	0	* AG	85	11.2	.0	10.0
D. Alemany SBA	*	-7	150	-7	0	* AG	564	10.7	.0	10.0
E. Alemany SBD	*	-7	0	-7	-150	* AG	838	9.6	.0	10.0
F. Alemany SBL	*	-5	150	0	0	* AG	106	11.2	.0	10.0
G. Geneva A EBA	*	-150	-7	0	-7	* AG	702	8.5	.0	10.0
H. Geneva A EBD	*	0	-7	150	-7	* AG	967	5.9	.0	10.0
I. Geneva A EBL	*	-150	-5	0	0	* AG	145	11.2	.0	10.0
J. Geneva A WBA	*	150	9	0	9	* AG	644	8.1	.0	22.3
K. Geneva A WBD	*	0	9	-150	9	* AG	691	5.8	.0	20.5
L. Geneva A WBL	*	150	2	0	0	* AG	254	12.1	.0	10.0
M. Alemany NBAX	*	7	-750	7	-150	* AG	687	5.6	.0	10.0
N. Alemany NBDX	*	7	150	7	750	* AG	606	5.6	.0	10.0
O. Alemany SBAX	*	-7	750	-7	150	* AG	670	5.6	.0	10.0
P. Alemany SBDX	*	-7	-150	-7	-750	* AG	838	5.6	.0	10.0
Q. Geneva EBAX	*	-750	-7	-150	-7	* AG	847	5.6	.0	10.0
R. Geneva EBDX	*	150	-7	750	-7	* AG	967	5.6	.0	10.0
S. Geneva WBAX	*	750	9	150	9	* AG	898	5.6	.0	22.3
T. Geneva WBDX	*	-150	9	-750	9	* AG	691	5.6	.0	20.5

CALINE4: CALIFDRNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-14	1.8
2. NW	*	-14	21	1.8
3. SW	*	-14	-14	1.8
4. NE	*	14	21	1.8
5. ES mdblk	*	150	-14	1.8
6. WN mdblk	*	-150	21	1.8
7. WS mdblk	*	-150	-14	1.8
8. EN mdblk	*	150	21	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-14	1.8
14. WN blk	*	-600	21	1.8
15. WS blk	*	-600	-14	1.8
16. EN blk	*	600	21	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

CALINE4: CALIFORNIA LINE SDURCE DISPERSIDN MDDEL
JUNE 1989 VERSION
PAGE 3

JDB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE)

RECEPTDR	*	BRG (DEG)	* PRED CONC (PPM)	*	CDNC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	278.	* 2.2	*	.4	.0	.0	.0	.3	.0	.7	.1
2. NW	*	172.	* 2.1	*	.3	.0	.0	.3	.8	.0	.2	.0
3. SW	*	82.	* 2.4	*	.2	.0	.0	.0	.5	.0	.2	.7
4. NE	*	188.	* 2.1	*	.7	.2	.0	.0	.3	.0	.0	.2
5. ES mdblk	*	277.	* 1.7	*	.0	.0	.0	.0	.0	.0	.0	.8
6. WN mdblk	*	98.	* 1.3	*	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	*	83.	* 1.8	*	.0	.0	.0	.0	.0	.0	.8	.0
8. EN mdblk	*	261.	* 1.4	*	.0	.0	.0	.0	.0	.0	.2	.1

9. SE mdblk	* 352.	* 2.0	* 1.0	.0	.1	.2	.3	.0	.0	.0
10. NW mdblk	* 173.	* 1.8	* .2	.1	.0	.9	.1	.1	.0	.0
11. SW mdblk	* 8.	* 2.0	* .3	.1	.0	.0	1.1	.0	.0	.0
12. NE mdblk	* 187.	* 1.6	* .1	.6	.0	.2	.2	.0	.0	.0
13. ES blk	* 276.	* 1.5	* .0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	* 97.	* 1.1	* .0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	* 84.	* 1.3	* .0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	* 263.	* 1.2	* .0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	* 354.	* 1.2	* .0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	* 174.	* 1.1	* .0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	* 6.	* 1.3	* .0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	* 186.	* 1.1	* .0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFDRNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSIDN
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	*	.0	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.2	.0	.2	.0	.0	.0	.0	.0	.1	.2	.0
4. NE	*	.0	.3	.0	.1	.0	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	*	.0	.2	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.2	.1	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	*	.0	.5	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.3	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.5
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.3
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.6	.0
17. SE blk	*	.0	.0	.0	.0	.6	.0	.0	.3	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.6	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission NBA	*	2	-150	2	0	* AG	558	9.0	.0	10.0
B. Mission NBD	*	2	0	2	150	* AG	720	6.1	.0	10.0
C. Mission NBL	*	2	-150	0	0	* AG	39	11.2	.0	10.0
D. Mission SBA	*	-4	150	-4	0	* AG	478	9.0	.0	10.0
E. Mission SBD	*	-4	0	-4	-150	* AG	433	6.1	.0	10.0
F. Mission SBL	*	-2	150	0	0	* AG	116	11.2	.0	10.0
G. Geneva A EBA	*	-150	-7	0	-7	* AG	899	9.6	.0	10.0
H. Geneva A EBD	*	0	-7	150	-7	* AG	1050	6.4	.0	10.0
I. Geneva A EBL	*	-150	-5	0	0	* AG	6	11.2	.0	10.0
J. Geneva A WBA	*	150	7	0	7	* AG	1088	10.2	.0	10.0
K. Geneva A WBD	*	0	7	-150	7	* AG	985	6.2	.0	10.0
L. Geneva A WBL	*	150	5	0	0	* AG	4	11.2	.0	10.0
M. Mission NBAX	*	2	-750	2	-150	* AG	597	5.6	.0	10.0
N. Mission NBDX	*	2	150	2	750	* AG	720	5.6	.0	10.0
D. Mission SBAX	*	-4	750	-4	150	* AG	594	5.6	.0	10.0
P. Mission SBDX	*	-4	-150	-4	-750	* AG	433	5.6	.0	10.0
Q. Geneva EBAX	*	-750	-7	-150	-7	* AG	905	5.6	.0	10.0
R. Geneva EBDX	*	150	-7	750	-7	* AG	1050	5.6	.0	10.0
S. Geneva WBAX	*	750	7	150	7	* AG	1092	5.6	.0	10.0
T. Geneva WBDX	*	-150	7	-750	7	* AG	985	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COOROINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-10	14	1.8
3. SW	-10	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (OEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.2	.3	.0	.0	.0	.1	.0	1.1	.0
2. NW	98.	2.6	.0	.2	.0	.3	.0	.0	.0	.2
3. SW	81.	2.1	.2	.0	.0	.0	.2	.0	.1	.8
4. NE	261.	2.1	.0	.3	.0	.2	.0	.0	.4	.0
5. ES mdblk	278.	1.8	.0	.0	.0	.0	.0	.0	.1	.9
6. WN mdblk	97.	1.7	.0	.0	.0	.0	.0	.0	.3	.2
7. WS mdblk	83.	2.1	.0	.0	.0	.0	.0	.0	1.2	.0
8. EN mdblk	262.	2.3	.0	.0	.0	.0	.0	.0	.2	.2

9. SE mdblk	354.	1.5	.7	.0	.0	.1	.2	.0	.0	.0
10. NW mdblk	173.	1.6	.1	.3	.0	.6	.0	.2	.0	.0
11. SW mdblk	6.	1.4	.3	.0	.0	.0	.4	.0	.0	.0
12. NE mdblk	187.	1.5	.0	.6	.0	.3	.0	.1	.0	.0
13. ES blk	277.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.2
2. NW	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
3. SW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	.0	.1	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.0	.4	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0
6. WN mdblk	.0	.2	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.4	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.8
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.9	.0
17. SE blk	.0	.0	.0	.0	.5	.0	.0	.3	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.4	.5	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.4	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	*	11	-150	11	0	* AG	341	8.1	.0	10.0
B. Bayshore NBO	*	11	0	11	150	* AG	630	5.9	.0	10.0
C. Bayshore NBL	*	9	-150	0	0	* AG	442	12.1	.0	10.0
D. Bayshore SBA	*	-11	150	-11	0	* AG	651	8.5	.0	17.0
E. Bayshore SBO	*	-11	0	-11	-150	* AG	529	5.8	.0	10.0
F. Bayshore SBL	*	-5	150	0	0	* AG	47	11.2	.0	10.0
G. Geneva A EBA	*	-150	-11	0	-11	* AG	241	10.3	.0	10.0
H. Geneva A EBO	*	0	-11	150	-11	* AG	47	6.4	.0	10.0
I. Geneva A EBL	*	-150	-9	0	0	* AG	289	11.2	.0	10.0
J. Geneva A WBA	*	150	0	0	0	* AG	0	5.6	.0	10.0
K. Geneva A WBO	*	0	0	-150	0	* AG	805	9.6	.0	10.0
L. Geneva A WBL	*	150	2	0	0	* AG	0	5.6	.0	10.0
M. Bayshor NBAX	*	11	-750	11	-150	* AG	783	5.6	.0	10.0
N. Bayshor NBOX	*	11	150	11	750	* AG	630	5.6	.0	10.0
O. Bayshor SBAX	*	-11	750	-11	150	* AG	698	5.6	.0	17.0
P. Bayshor SBDX	*	-11	-150	-11	-750	* AG	529	5.6	.0	10.0
Q. Geneva EBAX	*	-750	-11	-150	-11	* AG	530	5.6	.0	10.0
R. Geneva EBOX	*	150	-11	750	-11	* AG	47	5.6	.0	10.0
S. Geneva WBAX	*	750	0	150	0	* AG	0	5.6	.0	10.0
T. Geneva WBDX	*	-150	0	-750	0	* AG	805	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MOOEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-17	1.8
2. NW	*	-21	7	1.8
3. SW	*	-17	-17	1.8
4. NE	*	17	7	1.8
5. ES mdblk	*	150	-17	1.8
6. WN mdblk	*	-150	7	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	7	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-21	150	1.8
11. SW mdblk	*	-17	-150	1.8
12. NE mdblk	*	17	150	1.8
13. ES blk	*	600	-17	1.8
14. WN blk	*	-600	7	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	7	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-21	600	1.8
19. SW blk	*	-17	-600	1.8
20. NE blk	*	17	600	1.8

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	*	BRG (DEG)	* PRED CONC (PPM)	*	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	*	278.	1.7	*	.2	.0	.2	.0	.0	.0	.3	.0
2. NW	*	261.	1.8	*	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	*	6.	1.7	*	.0	.0	.0	.6	.0	.0	.2	.0
4. NE	*	263.	2.1	*	.0	.2	.0	.2	.0	.0	.1	.0
5. ES mdblk	*	273.	.8	*	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	101.	1.7	*	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	*	77.	1.4	*	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	*	268.	.7	*	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	349.	1.5	.4	.0	.0	.6	.1	.0	.0	.0	.0
10. NW mdblk	173.	1.3	.0	.0	.0	.1	.6	.0	.0	.0	.0
11. SW mdblk	6.	1.1	.0	.0	.0	.2	.1	.4	.0	.0	.0
12. NE mdblk	188.	1.2	.0	.5	.1	.1	.0	.0	.0	.0	.0
13. ES blk	272.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	268.	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.2	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	.4	.0	1.1	.0	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	.1	.0	.3	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	.4	.0	.8	.0	.0	.0	.0	.0	.1	.0	.0	.1
5. ES mdblk	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	.3	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.4	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. Sw mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.7
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.7	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.5	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 OEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COOROINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Bayshore NBA	9	-150	9	0	AG	729	8.5	.0	13.5
B. Bayshore NBO	9	0	9	150	AG	831	5.9	.0	10.0
C. Bayshore NBL	5	-150	0	0	AG	84	11.2	.0	10.0
O. Bayshore SBA	-9	150	-9	0	AG	784	8.5	.0	13.5
E. Bayshore SBO	-9	0	-9	-150	AG	894	5.9	.0	10.0
F. Bayshore SBL	-5	150	0	0	AG	139	11.2	.0	10.0
G. Old Coun EBA	-150	-7	0	-7	AG	237	10.7	.0	10.0
H. Old Coun EBD	0	-7	150	-7	AG	314	7.3	.0	10.0
I. Old Coun EBL	-150	-5	0	0	AG	35	11.2	.0	10.0
J. Old Coun WBA	150	4	0	4	AG	202	10.7	.0	10.0
K. Old Coun WBD	0	4	-150	4	AG	244	6.7	.0	10.0
L. Old Coun WBL	150	2	0	0	AG	73	11.2	.0	10.0
M. Bayshor NBAX	9	-750	9	-150	AG	813	5.6	.0	13.5
N. Bayshor NBOX	9	150	9	750	AG	831	5.6	.0	10.0
O. Bayshor SBAX	-9	750	-9	150	AG	923	5.6	.0	13.5
P. Bayshor SBDX	-9	-150	-9	-750	AG	894	5.6	.0	10.0
Q. Old Cou EBAX	-750	-7	-150	-7	AG	272	5.6	.0	10.0
R. Old Cou EBDX	150	-7	750	-7	AG	314	5.6	.0	10.0
S. Old Cou WBAX	750	4	150	4	AG	275	5.6	.0	10.0
T. Old Cou WBDX	-150	4	-750	4	AG	244	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	17	-14	1.8
2. NW	-17	10	1.8
3. SW	-15	-14	1.8
4. NE	15	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	17	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	15	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	17	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	15	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.5	.2	.5	.0	.2	.0	.1	.0	.1
2. NW	170.	1.4	.2	.0	.0	.0	.6	.0	.1	.0
3. SW	7.	1.7	.0	.1	.0	.8	.1	.1	.2	.0
4. NE	187.	1.7	.8	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	277.	.9	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.8	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.9	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.9	.0	.0	.0	.0	.0	.0	.0	.1

9. SE mdblk	352.	1.5	.8	.0	.0	.2	.1	.0	.0	.0
10. NW mdblk	172.	1.6	.2	.1	.0	.9	.0	.1	.0	.0
11. SW mdblk	7.	1.5	.1	.1	.0	.1	.7	.0	.0	.0
12. NE mdblk	188.	1.4	.0	.7	.0	.2	.1	.0	.0	.0
13. ES blk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.2	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MODEL
JUNE 1989 VERSION
PAGE 4

JDB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	.0	.0	.0	.0	.7	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.8	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.8	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.7	.3	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 3. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tunnel A NBA	2	-150	2	0	AG	285	8.2	.0	10.0
B. Tunnel A NBD	2	0	2	150	AG	124	5.8	.0	10.0
C. Tunnel A NBL	2	-150	0	0	AG	0	5.6	.0	10.0
D. Tunnel A SBA	-19	150	-19	0	AG	41	8.1	.0	10.0
E. Tunnel A SBD	-19	0	-19	-150	AG	236	5.8	.0	10.0
F. Tunnel A SBL	-19	150	0	0	AG	8	11.2	.0	10.0
G. Lagoon W EBA	-150	-2	0	-2	AG	0	5.6	.0	10.0
H. Lagoon W EBD	0	-2	150	-2	AG	179	6.4	.0	10.0
I. Lagoon W EBL	-150	-2	0	0	AG	0	5.6	.0	10.0
J. Lagoon W WBA	150	0	0	0	AG	10	10.3	.0	10.0
K. Lagoon W WBD	0	0	-150	0	AG	0	5.6	.0	10.0
L. Lagoon W WBL	150	2	0	0	AG	195	11.2	.0	10.0
M. Tunnel NBAX	2	-750	2	-150	AG	285	5.6	.0	10.0
N. Tunnel NBDX	2	150	2	750	AG	124	5.6	.0	10.0
D. Tunnel SBAX	-19	750	-19	150	AG	49	5.6	.0	10.0
P. Tunnel SBDX	-19	-150	-19	-750	AG	236	5.6	.0	10.0
Q. Lagoon EBAX	-750	-2	-150	-2	AG	0	5.6	.0	10.0
R. Lagoon EBDX	150	-2	750	-2	AG	179	5.6	.0	10.0
S. Lagoon WBAX	750	0	150	0	AG	205	5.6	.0	10.0
T. Lagoon WBDX	-150	0	-750	0	AG	0	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SDURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-26	7	1.8
3. SW	-26	-8	1.8
4. NE	8	7	1.8
5. ES mdblk	150	-8	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-8	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-26	150	1.8
11. SW mdblk	-26	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-8	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-8	1.8
16. EN blk	600	7	1.8
17. SE blk	8	-600	1.8
18. NW blk	-26	600	1.8
19. SW blk	-26	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WDRST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	83.	.5	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	95.	.5	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	85.	.6	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	187.	.7	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	279.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	92.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.7	.0	.0	.0	.0	.0	.0	.0	.1

9. SE mdblk	* 352.	* .5	* .4	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	* 173.	* .3	* .0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	* 13.	* .4	* .0	.0	.0	.0	.2	.0	.0	.0	.0
12. NE mdblk	* 183.	* .3	* .0	.1	.0	.0	.0	.0	.0	.0	.0
13. ES blk	* 275.	* .4	* .0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	* 92.	* .0	* .0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	* 91.	* .0	* .0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	* 264.	* .4	* .0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	* 354.	* .4	* .0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	* 174.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	* 7.	* .4	* .0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	* 183.	* .2	* .0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MDDEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

	CONC/LINK (PPM)											
RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
16. EN blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MDDEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	3. (M)
BRG=	WDRST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Sierra P NBA	5	-150	5	0	AG	544	9.0	.0	10.0
B. Sierra P NBD	5	0	5	150	AG	629	6.2	.0	10.0
C. Sierra P NBL	5	-150	0	0	AG	92	11.2	.0	10.0
D. Sierra P SBA	-4	150	-4	0	AG	213	8.2	.0	10.0
E. Sierra P SBD	-4	0	-4	-150	AG	90	5.8	.0	10.0
F. Sierra P SBL	-2	150	0	0	AG	0	5.6	.0	10.0
G. Lagoond EBA	-150	-5	0	-5	AG	47	10.3	.0	10.0
H. Lagoond EBD	0	-5	150	-5	AG	0	5.6	.0	10.0
I. Lagoond EBL	-150	-5	0	0	AG	85	11.2	.0	10.0
J. Lagoond WBA	150	0	0	0	AG	0	5.6	.0	10.0
K. Lagoond WBD	0	0	-150	0	AG	262	6.7	.0	10.0
L. Lagoond WBL	150	2	0	0	AG	0	5.6	.0	10.0
M. Sierra NBAX	5	-750	5	-150	AG	636	5.6	.0	10.0
N. Sierra NBDX	5	150	5	750	AG	629	5.6	.0	10.0
O. Sierra SBAX	-4	750	-4	150	AG	213	5.6	.0	10.0
P. Sierra SBDX	-4	-150	-4	-750	AG	90	5.6	.0	10.0
Q. Lagoond EBAX	-750	-5	-150	-5	AG	132	5.6	.0	10.0
R. Lagoond EBDX	150	-5	750	-5	AG	0	5.6	.0	10.0
S. Lagoond WBAX	750	0	150	0	AG	0	5.6	.0	10.0
T. Lagoond WBDX	-150	0	-750	0	AG	262	5.6	.0	10.0

□□

CALINE4: CALIFORNIA LINE SDURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	12	-12	1.8
2. NW	-10	7	1.8
3. SW	-10	-12	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	12	-150	1.8
10. NW mdblk	-10	150	1.8
11. SW mdblk	-10	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	7	1.8
17. SE blk	12	-600	1.8
18. NW blk	-10	600	1.8
19. SW blk	-10	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WINO ANGLE)

RECEPTOR	BRG (DEG)	PREO CONC (PPM)	CONC/LINK (PPM) A	B	C	O	E	F	G	H
1. SE	187.	1.0	.7	.0	.1	.0	.0	.0	.0	.0
2. NW	171.	.8	.3	.0	.1	.0	.0	.0	.0	.0
3. SW	7.	.8	.0	.2	.0	.2	.0	.0	.0	.0
4. NE	187.	1.0	.7	.0	.1	.0	.0	.0	.0	.0
5. ES mdblk	272.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	100.	.6	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	79.	.5	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	268.	.3	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	353.	1.1	.7	.0	.2	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.7	.1	.2	.0	.3	.0	.0	.0	.0	.0
11. SW mdblk	7.	.7	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.9	.0	.5	.0	.1	.0	.0	.0	.0	.0
13. ES blk	270.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	269.	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.6	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WDRST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 DEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. US 101 N NBA	4	-150	4	0	AG	76	10.3	.0	10.0
B. US 101 N NBD	4	0	4	150	AG	439	9.6	.0	10.0
C. US 101 N NBL	2	-150	0	0	AG	9	11.2	.0	10.0
D. US 101 N SBA	0	150	0	0	AG	0	5.6	.0	10.0
E. US 101 N SBD	0	0	0	-150	AG	0	5.6	.0	10.0
F. US 101 N SBL	-2	150	0	0	AG	0	5.6	.0	10.0
G. Sierra P EBA	-150	-5	0	-5	AG	63	8.1	.0	10.0
H. Sierra P EBD	0	-5	150	-5	AG	139	5.8	.0	10.0
I. Sierra P EBL	-150	-5	0	0	AG	23	11.2	.0	10.0
J. Sierra P WBA	150	4	0	4	AG	919	11.8	.0	10.0
K. Sierra P WBD	0	4	-150	4	AG	512	6.0	.0	10.0
L. Sierra P WBL	150	2	0	0	AG	0	5.6	.0	10.0
M. US 101 NBAX	4	-750	4	-150	AG	85	5.6	.0	10.0
N. US 101 NBDX	4	150	4	750	AG	439	5.6	.0	10.0
O. US 101 SBAX	0	750	0	150	AG	0	5.6	.0	10.0
P. US 101 SBDX	0	-150	0	-750	AG	0	5.6	.0	10.0
Q. Sierra EBAX	-750	-5	-150	-5	AG	86	5.6	.0	10.0
R. Sierra EBDX	150	-5	750	-5	AG	139	5.6	.0	10.0
S. Sierra WBAX	750	4	150	4	AG	919	5.6	.0	10.0
T. Sierra WBDX	-150	4	-750	4	AG	512	5.6	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTDR LOCATIDNS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	10	-12	1.8
2. NW	-7	10	1.8
3. SW	-7	-12	1.8
4. NE	10	10	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	10	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	10	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	10	1.8
17. SE blk	10	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	10	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	1.1	.0	.5	.0	.0	.0	.0	.0	.0
2. NW	97.	1.9	.0	.2	.0	.0	.0	.0	.0	.0
3. SW	80.	1.0	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	98.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	282.	1.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	93.	.9	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.7	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	1.7	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	358.	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.6	.0	.4	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	5.	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.7	.0	.6	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MOOEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

	CONC/LINK (PPM)										
RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.3	.4	.0	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MOOEL
JUNE 1989 VERSION
PAGE 1

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S
BRG= WORST CASE
CLAS= 7 (G)
MIXH= 1000. M
SIGTH= 10. DEGREES
Z0= 100. CM
VD= .0 CM/S
VS= .0 CM/S
AMB= .0 PPM
TEMP= 10.0 OEGREE (C)
ALT= 3. (M)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Shorelin NBA	5	-150	5	0	AG	8	8.8	.0	11.8
B. Shorelin NBO	5	0	5	150	AG	33	6.0	.0	10.0
C. Shorelin NBL	2	-150	0	0	AG	333	12.2	.0	10.0
O. Shorelin SBA	-5	150	-5	0	AG	391	8.8	.0	11.8
E. Shorelin SBD	-5	0	-5	-150	AG	88	6.0	.0	10.0
F. Shorelin SBL	-2	150	0	0	AG	0	5.6	.0	10.0
G. Sierra P EBA	-150	-9	0	-9	AG	134	8.8	.0	13.5
H. Sierra P EBO	0	-9	150	-9	AG	53	6.0	.0	10.0
I. Sierra P EBL	-150	-5	0	0	AG	23	11.2	.0	10.0
J. Sierra P WBA	150	9	0	9	AG	228	8.8	.0	13.5
K. Sierra P WBO	0	9	-150	9	AG	947	6.2	.0	10.0
L. Sierra P WBL	150	5	0	0	AG	4	11.2	.0	10.0
M. Shoreli NBAX	5	-750	5	-150	AG	341	5.6	.0	11.8
N. Shoreli NBDX	5	150	5	750	AG	33	5.6	.0	10.0
O. Shoreli SBAX	-5	750	-5	150	AG	391	5.6	.0	11.8
P. Shoreli SBOX	-5	-150	-5	-750	AG	88	5.6	.0	10.0
Q. Sierra EBAX	-750	-9	-150	-9	AG	157	5.6	.0	13.5
R. Sierra EBOX	150	-9	750	-9	AG	53	5.6	.0	10.0
S. Sierra WBAX	750	9	150	9	AG	232	5.6	.0	13.5
T. Sierra WBOX	-150	9	-750	9	AG	947	5.6	.0	10.0

□□

CALINE4: CALIFORNIA LINE SOURCE OISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JDB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-15	1.8
2. NW	-13	15	1.8
3. SW	-12	-17	1.8
4. NE	12	17	1.8
5. ES mdblk	150	-15	1.8
6. WN mdblk	-150	15	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	17	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-13	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-15	1.8
14. WN blk	-600	15	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	17	1.8
17. SE blk	13	-600	1.8
18. NW blk	-13	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	12	600	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSIDN
PAGE 3

JOB: Sierra Point
RUN: Existing Con (WDRST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.8	.0	.0	.2	.0	.0	.0	.2	.0
2. NW	170.	1.1	.0	.0	.4	.1	.0	.0	.0	.0
3. SW	5.	.8	.0	.0	.0	.4	.0	.0	.0	.0
4. NE	262.	1.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	99.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	77.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	265.	.7	.0	.0	.0	.0	.0	.0	.0	.0

9. SE mdblk	351.	.7	.0	.0	.4	.0	.0	.0	.0	.0
10. NW mdblk	174.	.8	.0	.0	.1	.5	.0	.0	.0	.0
11. SW mdblk	6.	.6	.0	.0	.3	.0	.0	.0	.0	.0
12. NE mdblk	187.	.5	.0	.0	.0	.2	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSIDN MDDEL
JUNE 1989 VERSION
PAGE 4

JOB: Sierra Point
RUN: Existing Con (WORST CASE ANGLE)
PDLLUTANT: Carbon Monoxide

IV. MDDEL RESULTS (WORST CASE WIND ANGLE) (CDNT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0

□□

Appendix D-2

URBEMIS2002 Model

URBEMIS 2002 For Windows 8.7.0

File Name: P:\BRI0601\Background\AirNoise\Sierra Point.urb
Project Name: Sierra Point Biotech Project EIR
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	62.96	68.23	712.32	0.43	65.55

URBEMIS 2002 For Windows 8.7.0

File Name: P:\BRI0601\Background\AirNoise\Sierra Point.urb
Project Name: Sierra Point Biotech Project EIR
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Strip mall	0.60	0.56	5.65	0.00	0.46
Office park	62.36	67.66	706.67	0.43	65.08
TOTAL EMISSIONS (lbs/day)	62.96	68.23	712.32	0.43	65.55

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Strip mall		42.94 trips/1000 sq. ft.	2.50	107.35
Office park		11.42 trips/1000 sq. ft.	540.19	6,168.91
		Sum of Total Trips		6,276.26
		Total Vehicle Miles Traveled		43,025.22

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
Office park				48.0	24.0	28.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2007.

APPENDIX E

FEDERAL HIGHWAY ADMINISTRATION (FHWA) HIGHWAY TRAFFIC NOISE PREDICTION MODEL

TABLE Existing Conditions-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (East of Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	78.7	154.9

TABLE Existing Conditions-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (101 NB off/on-ramp to Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.91

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.0	169.8	359.3

TABLE Existing Conditions-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Marina Blvd. (Shoreline Ct. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Existing Conditions

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	91.6	196.7

TABLE Existing Conditions-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Shoreline Ct. (South of Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Existing Conditions

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	92.9	197.1

TABLE Existing Conditions-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Old Country Rd. to San Bruno Ave.)
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16800 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.8	126.4	270.2	580.9

TABLE Existing Conditions-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Tunnel Ave. (Bayshore to Lagoon Wy.)
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	107.8	231.7

TABLE Existing Conditions-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Lagoon Way (Tunnel Ave. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.49

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	85.9	184.3

TABLE Existing Conditions-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Main St. to Geneva Ave.)
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13200 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	108.1	230.3	494.8

TABLE Existing Conditions-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Geneva Ave. to Sunnydale Avenue
NOTES: Sierra Point Biotech Project - Existing Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.05

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	112.8	233.2	497.5

TABLE Background Conditions-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (East of Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	78.7	154.9

TABLE Background Conditions-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (101 NB off/on-ramp to Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.91

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	85.0	169.8	359.3

TABLE Background Conditions-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Marina Blvd. (Shoreline Ct. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	91.6	196.7

TABLE Background Conditions-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Shoreline Ct. (South of Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	92.9	197.1

TABLE Background Conditions-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Old Country Rd. to San Bruno Ave.)
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
67.5	141.3	302.3	650.3

TABLE Background Conditions-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Tunnel Ave. (Bayshore to Lagoon Wy.)
NOTES: Sierra Point Biotech Project - Background Conditions

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	51.1	109.1	234.4

TABLE Background Conditions-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Lagoon Way (Tunnel Ave. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Background Conditions

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

---

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	85.8	184.3

TABLE Background Conditions-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Main St. to Geneva Ave.)
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16800 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.8	126.4	270.2	580.9

TABLE Background Conditions-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Geneva Ave. to Sunnydale Avenue
NOTES: Sierra Point Biotech Project - Background Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.4	135.2	283.0	605.8

TABLE Project Conditions-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (East of Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.20

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	77.9	153.1	322.6

TABLE Project Conditions-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (101 NB off/on-ramp to Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
63.0	116.9	242.4	517.5

TABLE Project Conditions-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Marina Blvd. (Shoreline Ct. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.82

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	105.2	226.0

TABLE Project Conditions-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Shoreline Ct. (South of Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.80

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	102.4	217.8

TABLE Project Conditions-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Old Country Rd. to San Bruno Ave.)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
67.5	141.3	302.3	650.3

TABLE Project Conditions-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Tunnel Ave. (Bayshore to Lagoon Wy.)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	56.3	120.4	258.9

TABLE Project Conditions-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Lagoon Way (Tunnel Ave. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.67

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	101.2	217.4

TABLE Project Conditions-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Main St. to Geneva Ave.)
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17400 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.37

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.1	129.4	276.5	594.7

TABLE Project Conditions-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Geneva Ave. to Sunnydale Avenue
NOTES: Sierra Point Biotech Project - Project Conditions

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
70.4	135.2	283.0	605.8

TABLE
Cumulative Conditions 2030 (without project)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (East of Shoreline Ct.)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	97.8	199.2

TABLE
Cumulative Conditions 2030 (without project)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (101 NB off/on-ramp to Shoreline Ct.)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.45

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	91.1	183.8	390.0

TABLE
Cumulative Conditions 2030 (without project)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Marina Blvd. (Shoreline Ct. to Sierra Pt. Parkway)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	54.8	116.7	250.8

TABLE
Cumulative Conditions 2030 (without project)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Shoreline Ct. (South of Sierra Pt. Parkway)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.80

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	57.4	118.9	253.8

TABLE
Cumulative Conditions 2030 (without project)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Old Country Rd. to San Bruno Ave.)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26000 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
79.8	168.4	361.1	777.1

TABLE
Cumulative Conditions 2030 (without project)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Tunnel Ave. (Bayshore to Lagoon Wy.)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	77.7	166.6	358.5

TABLE
Cumulative Conditions 2030 (without project)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Lagoon Way (Tunnel Ave. to Sierra Pt. Parkway)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.43

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	61.9	132.4	284.7

TABLE
Cumulative Conditions 2030 (without project)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Main St. to Geneva Ave.)
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 51300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
123.6	264.0	567.7	1222.2

TABLE
Cumulative Conditions 2030 (without project)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Geneva Ave. to Sunnydale Avenue
NOTES:
Sierra Point Biotech Project - Cumulative Conditions 2030 (without project)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
111.6	230.4	491.5	1056.5

TABLE Cumulative Conditions 2030 With Project-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (East of Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	66.7	126.3	263.1

TABLE Cumulative Conditions 2030 With Project-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Sierra Pt. Parkway (101 NB off/on-ramp to Shoreline Ct.)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
62.8	116.6	241.5	515.6

TABLE Cumulative Conditions 2030 With Project-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Marina Blvd. (Shoreline Ct. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 9 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	72.9	156.0	335.6

TABLE Cumulative Conditions 2030 With Project-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Shoreline Ct. (South of Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.63

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	74.5	156.6	335.7

TABLE Cumulative Conditions 2030 With Project-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Old Country Rd. to San Bruno Ave.)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
79.6	168.0	360.2	775.1

TABLE Cumulative Conditions 2030 With Project-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Tunnel Ave. (Bayshore to Lagoon Wy.)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	80.1	171.8	369.7

TABLE Cumulative Conditions 2030 With Project-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Lagoon Way (Tunnel Ave. to Sierra Pt. Parkway)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 8 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	65.1	139.3	299.7

TABLE Cumulative Conditions 2030 With Project-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Main St. to Geneva Ave.)
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 51600 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 74.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
124.1	265.0	569.9	1227.0

TABLE Cumulative Conditions 2030 With Project-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 08/28/2006
ROADWAY SEGMENT: Bayshore Blvd. (Geneva Ave. to Sunnydale Avenue
NOTES: Sierra Point Biotech Project - Cumulative Conditions 2030 With Project

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* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 41300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 71.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL	70 CNEL	65 CNEL	60 CNEL	55 CNEL
	111.6	230.4	491.5	1056.5

APPENDIX F

WATER SUPPLY ASSESSMENT

CITY OF BRISBANE

DEPARTMENT OF PUBLIC WORKS

WATER SUPPLY ASSESSMENT

For The Proposed

Sierra Point Biotech Project

As of July 2006

1. OVERVIEW

On June 7, 2006, the City of Brisbane Public Works Department received a request from LSA Associates, Inc. to produce a Water Supply Assessment (WSA) for the proposed Sierra Point Biotech Project, in order for the draft Environmental Impact Report (EIR) to be completed for the project.

This WSA determines that the City of Brisbane (City) currently has sufficient water supply to meet the projected water demands of the proposed Sierra Point Biotech Project together with those of its existing customers as well as the demands of other planned development during years of normal or above-normal precipitation. Based on the implementation of the San Francisco Public Utility Commission (SFPUC) Water System Improvement Program (WSIP) by 2010, the City will also have sufficient water supply during single dry years between 2010 and 2030 to meet the projected water demands. However, the City does not currently have sufficient water to meet the projected water demands of the proposed Sierra Point Biotech Project during multiple dry years and single dry years between 2005 and 2010. Future water supply shortages would be managed through water conservation and rationing programs and increased demand management, as described in this document. Brisbane currently has limited opportunity to develop alternative sources to supplement water supplies.

2. BACKGROUND

State Laws

During 2001, the California Legislature enacted two laws, SB 610 (Costa) and SB 221 (Kuehl), each designed to achieve greater coordination during the land use planning process between water suppliers and local land use agencies when considering certain large-scale development projects.

SB 610 requires preparation of a WSA for any development whose approval is subject to the California Environmental Quality Act (CEQA) and which meets the definition of "project" in Water Code Section 10912, i.e., project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The WSA must describe the proposed project's water demand over a 20-year period, identify the sources of water available to meet that demand and include an assessment of whether or not those water supplies are, or will be, sufficient to meet the demand for water associated with the proposed project, in addition to the demand of existing customers and other planned future development.

If the conclusion is that water supplies are or will be insufficient, then the WSA is to describe plans (if any) for acquiring additional water supplies, and the measures that are being undertaken to acquire and develop those supplies.

The WSA required by SB 610 is to be prepared sufficiently early in the development review process that it can be incorporated in the CEQA evaluation and documentation of the project. In the case of a project which will require an Environmental Impact Report (EIR), the WSA should be available before the Draft EIR is released for public comment.

The City's Roles and Responsibilities Under SB 610

SB 610 is drafted on the assumption that the land use planning agency (i.e., the city or county) is not the water supplier for the proposed project. They thus impose distinct duties on the city/county and on the water supplier – which is assumed to be an entirely separate agency.

In the case of the City of Brisbane this assumption is incorrect since the City performs both roles. However, the statute's terminology, while awkward, can be adapted to our situation.

The "City," as that term is used in the statute, means the components of city government that have responsibilities for the land use decision process. At the staff level, this is the Community Development Department.

The "water supplier," for SB 610 purposes, can be understood to mean the Public Works Department, which is responsible for the City's Water Enterprise Fund.

The "governing body," as used in SB 610, refers to the City Council, which is required to approve the WSA at a regular or special meeting.

Use of the WSA

The WSA, including the information regarding plans for acquiring additional supplies, shall be included in the environmental document prepared for the

project. In the case of Sierra Point Biotech Project, it will be included in the draft EIR, currently in preparation.

At the stage of project approval/disapproval, the City "shall determine based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." If the City determines at that point that water supplies will not be sufficient, it must include that determination in its findings for the project.

Urban Water Management Plan (UWMP)

The City of Brisbane is not classified as an urban water supplier as defined in Section 10617 of the California Urban Water Management Plan (UWMP), and thus is not required to adopt an UWMP.

The California Urban Water Management Planning Act requires that each urban water supplier, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, shall prepare, update and adopt an urban water management plan at least once every five years on or before December 31, in years ending in five and zero.

The City of Brisbane is currently not classified as an urban water supplier because it serves less than 3,000 customers (approximately 1240 service connections, or customers) and supplies less than 3,000 acre-feet of water annually (served approximately 376 acre-ft of water to its customers between July 1, 2005 and June 30, 2006).

3. THE [PROPOSED] PROJECT AND PROJECTED WATER DEMAND

Project Description

The Sierra Point Biotech Project is a proposed planned development located in the Sierra Point Development east of Shoreline Court and south of Sierra Point Parkway. The 22 acre site is currently undeveloped. The project as proposed would consist of five buildings and one parking structure, adding up to 540,185 square feet of office/research and development space and 1,786 parking stalls in surface and garage parking. The project would include 2,500 square feet of retail space for two tenants in the first floor level of the parking structure. The proposed project is to accommodate approximately 1,800 employees (Attachment B-Project Description).

Projected Water Demand

The estimated future water use at the Sierra Point Biotech Project is 1,039 acre feet per year (AF/Y) or 0.124 million gallons per day, per Attachment 'A'.

The projected employment population for the Sierra Point Biotech Project has been accounted for in the 2030 Water Demand Projections. The Sierra Point Biotech Project EIR prepared by LSA Associates, Inc., May 2006 projects the project would accommodate approximately 1,800 employees, which is within the additional 4,550 employment population projected for Sierra Point in 2030 that was used in the Demand Side Management Least-Cost Planning Decision Support System (DSS) model (Maddaus 2003) to calculate the 2030 Water Demand Projections.

4. WATER SUPPLY ANALYSIS

The City of Brisbane currently receives 100 percent of its potable water supply from the Hetch Hetchy regional water system operated for the City and County of San Francisco by the San Francisco Public Utilities Commission (SFPUC). Table 1 provides a summary of the City's potable water supply quantities received from SFPUC over the past 10 years.

Table 1: Water received from the wholesaler (SFPUC) over the previous 10 years

Water Supply Sources	FY 1996 - 1997	FY 1997 - 1998	FY 1998 - 1999	FY 1999 - 2000	FY 2000 - 2001	FY 2001 - 2002	FY 2002 - 2003	FY 2003 - 2004	FY 2004 – 2005	FY 2005 - 2006
SFPUC (mgd)	0.295	0.275	0.340	0.467	0.381	0.387	0.394	0.395	0.359	0.336
SFPUC (mg/yr)	107.5	100.3	123.9	170.4	138.9	141.1	143.7	144.0	131.2	122.6
SFPUC (acre-ft/yr)	330.0	308.0	380.3	523.0	426.4	433.1	440.9	442.0	402.5	376.1

Source: City of Brisbane electronic SFPUC water purchase records

The demands reflect annual variations due to weather, implementation of conservation practices, construction and commercial building occupancy. The supplied water total in 1999 is abnormally high and is not indicative of the typical water use pattern seen over the last ten years. In 1999, a neighboring water district, Guadalupe Valley Municipal Improvement District (GVMID), used water from the City of Brisbane to help supplement its water demand.

GVMID is a small water district located within the Brisbane City limits bordering the City of Brisbane Water District. Both water districts are

managed and operated by the City. Because the two districts are interconnected, the City has the capability of wheeling available water, at no cost, between the two districts when water is needed and available.

In 1999, a large SFPUC construction project shut down one of the two large pipelines delivering water to Brisbane and Guadalupe Valley Municipal Improvement District (GVMID). The shutdown temporary left one of the two water turnouts in GVMID isolated from the SFPUC water supply pipeline (Crystal Springs Pipeline No. 1). With the GVMID Water District partially isolated from the SFPUC water supply, it was dependent on the active turnouts in the City of Brisbane Water District to help supplement its water demand.

Projected water demand for the City (Table 2) was identified in the 2004 SFPUC Wholesale Customer Water Demand Projections.

Table 2: City's projected potable water demand quantities to 2030

Water Supply Sources	2005	2010	2015	2020	2025	2030
SFPUC (mgd)	0.50	0.58	0.67	0.76	0.84	0.93
SFPUC (mg/yr)	182.5	211.7	244.6	277.4	306.6	339.5
SFPUC (acre-ft/yr)	559.8	649.4	750.3	850.9	940.5	1,041.4

Source: Wholesale Customer Water Demand Projections and 2030 Purchase Estimates, San Francisco Public Utilities Commission, 2004 (Attachment C).

The 2004 SFPUC Wholesale Customer Water Demand Projections was the result of a comprehensive water demand study conducted under the direction of the SFPUC in conjunction with its 28 wholesale customers. The study used an end-use demand model, DSS model, to project total water demand out to 2030 for each wholesale customer, including the City of Brisbane. The DSS model was also used to determine conservation potential in the individual wholesale customer service areas.

Cost effective demand management measures were evaluated, as part of the SFPUC demand study, to determine how much of Brisbane's demand could potentially be met through water conservation. This amount was deducted from the water demand to arrive at the total projected water deliveries through 2030.

The 2001 water use data for each individual wholesale customer was used as the base year for water demand forecasting. The DSS model used population and employment projections to estimate future water demands. The City of Brisbane provided the following population and employment projections, Table 3, for input into the DSS model.

Table 3: City of Brisbane Population and Employment Projections

2001 DSS (Base Year) Population	2030 DSS Population Projection	2001 DSS (Base Year) Employment	2030 DSS Employment Projection
3,159	4,606	3,658	19,575

The population and employment projections supplied to SFPUC were obtained from projections provided in the City of Brisbane 1996-2006 Housing Element (2002), City of Brisbane 1993 General Plan: Environmental Impact Report Volume I and the Bi-County Transportation Study.

The 1996-2006 Housing Element estimated an additional 658 units to final build-out. An additional 1,448 residential population (ABAG: 2.20 population/housing unit) was added to the existing population of 3,159 to obtain the projected 2030 residential population of 4,606.

The employment estimates, summarized in Table 4, were obtained from the following tables (Attachment D) in the City of Brisbane 1993 General Plan: Environmental Impact Report Volume 1:

- Baseline 1990 Employment - U.S. Census and Business Surveys;
- Projected 2000 Employment – 1993 General Plan 10-Year Horizon;
- Projected 2030 Employment – 1993 General Plan Beyond 10-Year Increment

The Bi-County Transportation Study projects an additional 10,000 employment total for final build-out of the Baylands.

Table 4: Initial and Projected Employment Population

Brisbane	1990	2000	2030
Sierra Point	875	2,387	6,937
Visitacion & San Bruno	75	75	75
Industrial Way	350	350	350
Bayshore Blvd.	406	426	593
Baylands	420	420	11,620
Total	**2,126**	**3,658**	**19,575**

The results from the DSS model provided projected water demands out to 2030 factoring the impacts of plumbing codes and future conservation programs.

In April 2005, the City of Brisbane provided SFPUC with the amounts of water that the City expected to purchase for the next 25 years, in 5-year increments, based on the results from the DSS model. Table 5 provides a summary of the City's best estimate of water purchases from the SFPUC Regional Water System through the year 2030.

Table 5: Projected water supplied from the wholesaler (SFPUC) to 2030

Water Supply Sources	2005	2010	2015	2020	2025	2030
SFPUC (mgd)	0.50	0.70	0.75	0.80	0.85	0.89
SFPUC (mg/yr)	182.5	255.5	273.8	292.0	310.3	324.9
SFPUC (acre-ft/yr)	559.8	783.7	839.9	895.7	951.8	996.6

Source: Wholesale Customer Water Demand Projections and 2030 Purchase Estimates, San Francisco Public Utilities Commission, 2004.

On June 1, 2005, SFPUC provided written water availability projections verifying its ability to meet the City's projected demand in years of average and above average precipitation. The written documentation provided by the City of Brisbane and SFPUC is included in Attachment C.

Existing water supply entitlements, rights and/or water service contracts relevant to this water supply are:

- 1984 Settlement Agreement and Master Water Sales Contract between Suburban Purchasers and the City and County of San Francisco;
- Water Supply Contract between City and County of San Francisco and the City of Brisbane (August 1984).

Necessary regulatory approval to deliver the SFPUC water supply is:

- State of California Department of Health Services Water Supply Permit #4110002.

Master Water Contract and Implications for Long Term Supply

The business relationship between the City and County of San Francisco and its wholesale customers is largely defined by the *Settlement Agreement and Master Water Sales Contract* (Master Contract) executed in 1984. The Master Contract primarily addresses the rate-making methodology used by San Francisco in setting wholesale water rates for its wholesale customers in

addition to addressing water supply and water shortages for the regional water system. The contract expires on June 30, 2009.

In terms of water supply, the Master Contract provides for a 184 million gallon per day (mgd, expressed on an annual average basis) "Supply Assurance" to the SFPUC's wholesale customers, subject to reduction in the event of drought, water shortage, earthquake, other acts of God, or rehabilitation and maintenance of the system.

The Master Contract does not guarantee that San Francisco will meet peak daily or hourly customer demands when their annual usage exceeds the Supply Assurance. The SFPUC's wholesale customers have agreed to the allocation of 184 mgd Supply Assurance among themselves, with each entity's share of the Supply Assurance set forth on a schedule adopted in 1993. This Supply Assurance survives the termination of the Master Contract in 2009. The 1984 Master Sales Agreement between Suburban Purchasers and the City and County of San Francisco is found in Attachment E.

City of Brisbane Water Supply Contract

The City of Brisbane, along with 29 other Bay Area water suppliers, signed the Settlement Agreement and Master Contract with San Francisco in 1984; the Master Contract is supplemented by an individual Water Supply Contract. The City of Brisbane's contracted Supply Assurance is 0.46 mgd or 515 acre-feet per year (af/yr). The City is currently consuming approximately 0.32 mgd or 360 acre-ft/yr (2005). The Water Supply Contract between the City and County of San Francisco and the City of Brisbane is found in Attachment F.

Description of Water Supply Improvement Program

In order to enhance the ability of the SFPUC water supply system to meet identified service goals for water quality, seismic reliability and water supply, the SFPUC is undertaking a Water System Improvement Program (WSIP). The WSIP will deliver capital improvements aimed at enhancing the SFPUC's ability to meet its water service mission of providing high quality water to its customers in a reliable, affordable and environmentally sustainable manner.

The origins of the WSIP are rooted in the SFPUC's *Water Supply Master Plan* (April 2000). Planning efforts for the WSIP gained momentum in 2002 with the passage of San Francisco ballot measures Propositions A and E, which approved the financing for the water system improvements. Also in 2002, Governor Davis approved Assembly Bill No. 1823, the Wholesale Regional Water System Security and Reliability Act, which requires San Francisco to

take steps to improve the Hetch Hetchy regional water system. The WSIP is expected to be completed in 2016.

A Program Environmental Impact Report (PEIR) is being prepared under the California Environmental Quality Act (CEQA) for the WSIP. Projects included in the WSIP will undergo individual project specific environmental review as required. Each project will also be reviewed for compliance with the National Environmental Policy Act (NEPA) and local, state and federal permitting requirements as necessary.

Interim Water Shortage Allocation Plan

The SFPUC can meet the demands of its retail and wholesale customers in years of average and above-average precipitation. The Master Contract allows the SFPUC to reduce water deliveries during droughts, emergencies and for scheduled maintenance activities.

The SFPUC and all wholesale customers adopted an *Interim Water Shortage Allocation Plan* (IWSAP) in 2000 to address the allocation of water between San Francisco and wholesale customers in aggregate and among individual wholesale customers during water shortages of up to 20 percent of average system-wide use. This Plan expires in June 2009. The Interim Water Shortage Allocation Plan is provided as Attachment G.

The IWSAP has two components. The Tier One component of the IWSAP allocates water between San Francisco and the wholesale customer agencies collectively. The IWSAP distributes water between two customer classes based on the level of shortage as shown in Table 6.

Table 6
Drought Allocation Between SFPUC and Wholesale Customers

Level of System Wide Reduction in Water Use Required	Share of Available Water	
	SFPUC Share	Wholesale Customers Share
5% or less	35.5%	64.5%
6% through 10%	36.0%	64.0%
11% through 15%	37.0%	63.0%
16% through 20%	37.5%	62.5%

The Tier Two component of the IWSAP allocates the collective wholesale customer share among each of the 28 wholesale customers. This allocation is based on a formula that takes three factors into account, the first two of which are fixed: 1) each agency's Supply Assurance from SFPUC, with certain exceptions; and 2) each agency's purchases from SFPUC during the three years preceding adoption of the IWSAP (FYs 1996-97, 1997-98, and 1998-99). The third factor is the agency's rolling average of purchases of

water from SFPUC during the three years immediately preceding the onset of shortage.

The IWSAP allows for voluntary transfers of shortage allocations between SFPUC and any wholesale customer and between wholesale customer agencies. Water "banked" by a wholesale customer, through reductions in usage greater than required, may also be transferred.

5. CURRENT WATER SUPPLY RELIABILITY

Supply and Demand in Normal Years

The City of Brisbane receives all of its water from the City and County of San Francisco's regional system, operated by the SFPUC. In April 2005, the City of Brisbane provided SFPUC with the amounts of water that the City expected to purchase for the next 25 years, in 5-year increments. The SFPUC responded to the future water purchase estimates in writing on June 1, 2005 confirming it can meet Brisbane's water demands in years of normal or above-normal precipitation.

Supply and Demand in Dry Years

The SFPUC evaluated the reliability of the water supply, given the estimated system purchases for the years 2010 through 2030 and the expected performance of the water system based on a repeat of the historical hydrology from 1920 through 2002. The SFPUC assumed that the historical hydrology period is indicative of future events. The actual anticipated reduction for the City of Brisbane is based on the IWSAP. The basis of water year data used by SFPUC is shown on Table 7.

TABLE 7
Basis of Water Year Data

Water Year Type	Base Year (s)	Historical Sequence
Normal Water Year	2004	
Single-Dry Water Year	1987	1920-2002
Multiple Dry Water Year	1987-1989	1920-2002

Source: San Francisco Public Utilities Commission communication data June 1, 2005

When the SFPUC declares a water shortage, the City of Brisbane will be required to make relatively large water use cutbacks as specified by the IWSAP adopted by the SFPUC and all suburban purchasers (including the City of Brisbane) in 2001, pursuant to section 7.03(a) of the Master Water Sales Contract.

Minimum Supply During Next Three Years

Table 8 describes the current level of water supply reliability for the next immediate three-year period, based on the FY 2004-2005 purchase request by the City. Although the City has a contractual "Supply Assurance" of 515 acre-ft/yr (0.46 mgd), this is not an absolute guaranteed amount. In times of shortage, the Master Contract allows the SFPUC to provide less than the assurance.

Table 8
Current Water Supply Reliability (in mgd)

	Purchase Request 2005	Single Dry Water Year	Multiple Dry Years		
			Year 1	Year 2	Year 3
System-Wide Shortage %	No Shortage	10%	10%	20%	20%
BAWSCA Allocation (mgd)	177.9	157.4	157.4	136.8	136.8
City of Brisbane Allocation (mgd)	0.39	0.34	0.34	0.30	0.30
City of Brisbane Cutback %	0%	12.8%	12.8%	23.1%	23.1%
Frequency	89.2%	6.0%	6.0%	4.8% for 2 or more years	

Values based on letter sent to Jerry Flanagan (City) from Paula Kehoe (SFPUC) dated June 1, 2005. The frequencies are estimated on data from 1920 to 2002; 5 out of 83 (6%) years have 10% system-wide shortages and 4 out of 83 years (4.8%) have a 20% system-wide shortage in modeling conducted.

Supply and Demand Comparisons in a Single Dry Year

Table 9 compares the projected single-dry-year supply and demand over the next 20 years. SFPUC anticipates that in the event of one critically dry year, a system-wide reduction would not be necessary until 2030, assuming the SFPUC WSIP is implemented.

Table 9
Projected Single-Dry-Year Supply and Demand Comparison (mgd)

	2010	2015	2020	2025
Demand	0.70	0.75	0.80	0.85
Supply	0.70	0.75	0.80	0.85
Difference	0.0	0.0	0.0	0.0
% Deficiency	0%	0%	0%	0%

Source: San Francisco Public Utilities Commission communication dated June 1, 2005

Supply and Demand Comparison in Multiple Dry Years

Table 10 compares projected supply and demand during multiple dry years over the next 20 years. Between 2005 and 2010, a reduction in water usage of roughly 6% in the first dry year would be needed, as shown in Table 8. However, the additional planned storage based on the full implementation of the SFPUC WSIP, which is expected to be operational in 2010, would provide sufficient supply to fully meet the first dry year demands beyond 2010, until 2030. In the second and third dry years, water supplies would not meet demand, and system-wide reductions of 10 to 20 percent would be needed. For the City of Brisbane, this would result in cutbacks ranging from 38% in 2010 to 56% in 2025.

TABLE 10
Projected Multiple-Dry-Year Supply and Demand Comparison (mgd)

	2010	2015	2020	2025
Multiple Dry Water Years – Year 1				
Demand	0.70	0.75	0.80	0.85
Supply	0.70	0.75	0.80	0.85
Difference	0.0	0.0	0.0	0.0
% Deficiency	0%	0%	0%	0%
Multiple Dry Water Years – Year 2				
Demand[1]	0.71	0.76	0.81	0.86
Supply	0.45	0.45	0.47	0.48
Difference	0.26	0.31	0.34	0.38
% Deficiency	37%	41%	58%	56%
Multiple Dry Water Years – Year 3				
Demand[1]	0.72	0.77	0.82	0.87
Supply	0.45	0.45	0.47	0.48
Difference	0.27	0.32	0.35	0.39
% Deficiency	38%	58%	57%	45%

[1]Interplated from 2030 Purchased Estimates, SFPUC, 2004
Source: San Francisco Public Utilities Commission communication dated June 1, 2005

6. WATER SUPPLY SUFFICIENCY

Determination: The City of Brisbane currently has sufficient water supply to meet the projected water demands of the proposed Sierra Point Biotech Project together with those of its existing customers as well as the demands of other planned development during years of normal or above-normal precipitation. Based on the SFPUC WSIP fully implemented by 2010, the City of Brisbane will also have sufficient water supply during single dry years between 2010 and 2030 to meet the projected water demands. However, the City does not have sufficient water to meet the projected water demands of

the proposed Sierra Point Biotech Project during multiple dry years, and single dry years between 2005 and 2010.

When the SFPUC declares a water shortage, the City will be required to make relatively large water use cutbacks as specified in the IWSAP.

Table 11 compares the current (2005) water supply and demand for normal, single year and multiple dry years.

Table 11: Comparison of current supply and demand for normal, single dry, and multiple dry years.

Current Supply & Demand	Normal Year (mgd)	Single Dry Year (mgd)	Multiple Dry Years (mgd)
Supply total in 2005[1]	0.46	0.34	0.30
Demand total in 2005	0.321	0.321	0.321
Difference	**0.139**	**0.019**	**-0.021**
Demand total in 2005 (including proposed project)	0.445	0.445	0.445
Difference (including proposed project)	**0.015**	**-0.105**	**-0.145**

[1] Values based on letter sent to Jerry Flanagan (City) from Paula Kehoe (SFPUC) dated June 1, 2005.

A comparison between the projected (2025) water supply and demand for normal, single year and multiple dry years is shown on Table 12.

Table 12: Comparison of 20 year projection of supply and demand for normal, single dry, and multiple dry years.

2025 Supply & Demand	Normal Year (mgd)	Single Dry Year (mgd)	Multiple Dry Years (mgd)
Supply total[1]	0.85	0.85	0.48
Demand total	0.85	0.85	0.85
Difference	**0**	**0**	**-0.37**
Demand total (including proposed project)	0.85	0.85	0.85
Difference (including proposed project)	**0**	**0**	**-0.37**

[1] Values based on letter sent to Jerry Flanagan (City) from Paula Kehoe (SFPUC) dated June 1, 2005.

The projected employment population for the Sierra Point Biotech Project has been accounted for in the 2030 Water Demand Projections. The Sierra Point Biotech Project EIR prepared by LSA Associates, Inc., May 2006 projects the project would accommodate approximately 1,800 employees which is within the 4,550 total employment population projections for Sierra Point in 2030 that were used in the DSS model to calculate the 2030 Water Demand Projections.

7. INSUFFICIENT WATER SUPPLY

Factors Resulting in Inconsistency of Supply

As noted, SFPUC can meet Brisbane's water usage needs in years of normal or above-normal precipitation and single-dry years. However, water supplies are expected to be impacted by less-than normal precipitation over multiple years and single years between 2005 and 2010, resulting in insufficient water supplies.

The City will manage insufficient water supplies in the future through water conservation and rationing programs and increased demand management, as described in this WSA. The City has historically managed previous SFPUC water rationing events by adopting and enforcing local water conservation and rationing plans, as described in the next section.

Cost effective demand management measures were evaluated, as part of the SFPUC demand study, to determine how much of Brisbane's demand could potentially be met through water conservation. This amount was deducted from the water demand to arrive at the total projected water deliveries through 2030. The existing demand management measures may be re-evaluated and additional conservation measures could be added in order to lower the future water demand for the City.

Brisbane currently has limited opportunity to develop alternative sources to supplement water supplies. Brisbane does not use groundwater and there are currently no plans to use groundwater in the future due to physical and economic restraints. Brisbane is exploring the possibility to use recycle water to help augment water supplies in the future through current participation with neighboring municipalities in a recycle water feasibility study. Brisbane does have the ability to wheel available water at no cost from the neighboring GVMID Water District.

Water Shortage Rationing Plan

During the late 1980's/early 1990's drought, the City developed and adopted a "Water Conservation Program" in order to reduce water usage in the Brisbane Water Service Area in accordance with SFPUC's water rationing program and in keeping with the need for water conservation. A copy of the following resolutions can be found in Attachment H:

- Resolution No. 88-017, adopted on May 23, 1988, "A Resolution of the City Council of the City of Brisbane declaring a Water Shortage Emergency and adopting a Water Conservation Program".

- Resolution No. 88-020, adopted on June 13, 1988, "A Resolution of the City Council of the City of Brisbane declaring a Water Shortage Emergency and adopting a Water Conservation Program including excess use charges, and repealing Resolution 88-17".
- Resolution No. 89-027, adopted May 22, 1989, "A Resolution of the City Council of the City of Brisbane Declaring an End to the Water Shortage Emergency and Repealing Resolution #88-20 and Resolution #88-35".
- Resolution No. 90-034, adopted June 11, 1990, "Declaring a water shortage emergency and adopting a Water Conservation Program".
- Resolution No. 91-013, adopted March 11, 1991, "A Resolution of the City Council of the City of Brisbane Declaring a Water Shortage Emergency and Adopting a Water Conservation Program".
- Resolution No. 93-010, adopted March 22, 1993, "A Resolution of the City Council of the City of Brisbane Declaring an End to the Water Shortage Emergency and Rescinding Resolution 91-13".
- Resolution No. 2001-48, adopted May 29, 2001, "A Resolution approving the Bay Area Water Users Association Interim Water Shortage Allocation Plan and the Interim Water Shortage Allocation Plan among Suburban Purchases".

The 1990 Water Conservation Program required 25% mandatory reduction in consumption on a system-wide basis, 60% mandatory reduction in consumption for outside irrigation, restrictions on various types of water use, an excess use charge structured to a maximum of 10 times the basic consumption charge for exceeding the allotment, and flow restrictions and termination of water service for non-compliance with the program elements.

The 1991 Water Conservation Program required even more restrictive 45% mandatory reduction in consumption on a system-wide basis and 90% mandatory reduction in outside irrigation.

Comparison of SFPUC's single and multiple dry year water supply projections to the potable water demand projections developed by SFPUC and Brisbane indicates that the City may have to institute a similar Water Conservation Program in order to meet the water supply deficits as shown in this WSA.

The Brisbane Public Works Department will continue to develop and implement cost-effective water conservation measures ("best management practices" or "BMP's") during normal years as a way to increase supply reliability for existing and future customers.

Another possible source of water supply is the transferring of water entitlements and/or banked water from other agencies that are also members of the Bay Area Water Supply & Conservation Agency (BAWSCA). BAWSCA represents the interests of 26 cities and water districts, and two private

utilities, that purchase water wholesale from the San Francisco regional water system. The entities provide water to 1.7 million people, businesses and community organizations in Alameda, Santa Clara and San Mateo counties. The Interim Water Shortage Allocation Plan (IWSAP) adopted by all BAWSCA agencies and SFPUC provides for voluntary transfers of water among BAWSCA agencies during periods when mandatory rationing is in effect on the San Francisco regional water system. Some BAWSCA agencies have the capacity to draw more heavily on local groundwater during dry years and thus may be willing to agree to transfer some portion of their San Francisco entitlement to other BAWSCA agencies willing to pay for this back up supply. This is a possible source of relief from rationing at levels more severe than those required in neighboring communities. Reliance on this potential source is not recommended unless and until contracts are signed with one or more other BAWSCA agencies.

8. Conclusions

This WSA determines that the City of Brisbane (City) currently has sufficient water supply to meet the projected water demands of the proposed Sierra Point Biotech Project together with those of its existing customers as well as the demands of other planned development during years of normal or above-normal precipitation. Based on the implementation of the SFPUC WSIP by 2010, the City will also have sufficient water supply during single dry years between 2010 and 2030 to meet the projected water demands. However, the City does not currently have sufficient water to meet the projected water demands of the proposed Sierra Point Biotech Project during multiple dry years, and single dry years between 2005 and 2010.

Currently, the City has little, if any, opportunity for developing reliable alternative water supplies. Water supply shortages will be managed through conservation and rationing programs and increased demand management, as described in this WSA.

The existing demand management measures, used to establish the City's future water demand, may be re-evaluated and additional cost-effective system wide conservation measures may be considered in order to lower the future water demand for the City. New development, including the proposed Sierra Point Biotech Project, will be asked to determine their individual project conservation potential and implementation of cost effective demand management measures may be included in their Conditions of Approval.

In addition, Brisbane has the ability to wheel available water at no cost from the neighboring GVMID Water District. GVMID will be complying with similar mandatory rationing and impacts to its own water supply and demand will have to be evaluated.

9. REFERENCES

- City of Brisbane Water Master Plan, June 2003.
- 2005 Urban Water Management Plan for the City and County of San Francisco, December 2005.
- San Francisco PUC 2030 Purchase Estimates Technical Memorandum, December 2004.
- San Francisco PUC Wholesale Customer Water Demand Projections Technical Report, November 2004.
- Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001.
- 1984 Master Sales Agreement between Suburban Purchasers and the City and County of San Francisco.
- Water Supply Contract between the City and County of San Francisco and the City of Brisbane.
- State of California Department of Health Services Water Supply Permit #4110002.
- City of Redwood City Urban Water Management Plan (UWMP), June 2003.
- City of Redwood City Water Supply Assessment for the Proposed Bayside Gardens Project, January 2004.
- City of Hayward 2005 Urban Water Management Plan.
- City of Millbrae 2005 Urban Water Management Plan.
- City of Burlingame 2005 Urban Water Management Plan.

10. ATTACHMENTS

A. Phase 1 Assistance-Proposed Water and Sewer Mains for the Sierra Point Biotech Project by Brown and Caldwell dated June 30, 2006.
B. Sierra Point Biotech Project EIR – Project Description, LSA Associates, Inc., May 2006.
C. San Francisco Public Utilities Commission Suburban Customers Purchase Projections, 2005
D. 1993 General Plan: Environmental Impact Report Volume 1
E. 1984 Master Sales Agreement between Suburban Purchasers and the City and County of San Francisco
F. Water Supply Contract between the City and County of San Francisco and the City of Brisbane
G. Interim Water Shortage Allocation Plan (IWSAP)
H. Water Conservation Program Resolutions

ATTACHMENT A

Phase 1 Assistance-Proposed Water and Sewer Mains for the Sierra Point Biotech Project by Brown and Caldwell dated June 30, 2006

201 North Civic Drive, Suite 115
Walnut Creek, California 94596-3864

Tel: (925) 937-9010
Fax: (925) 937-9026

June 30, 2006

BROWN AND CALDWELL

Ms. Judith H. Malamut
LSA Associates, Inc.
2215 Fifth Street
Berkeley, California 94710

130717-001

Subject: Phase 1 Assistance—Proposed Water and Sewer Mains for the Sierra Point Biotech Project

Dear Ms. Malamut:

In completion of LSA Associates, Inc (LSA) authorization dated May 10, 2006, Brown and Caldwell has estimated preliminary water and sewer demands for the subject project. The Sierra Point Biotech Project will consist of biotech research and development, retail, and parking. Table 1 presents our understanding of land use and area together with corresponding flow estimates. In summary, we recommend using an average day demand of about 0.124 million gallons per day (mgd).

Table 1. Estimated Flows

Use	Water Demand	Area (thousand sq ft)	Total Water Demand, thousand gpd
Retail	50gpd / 1000 sq ft	0.003	200 (minimum amount for retail)
Research and Development	10,000gpd / acre	0.540	0.124
Parking	0	1786 spaces	0
Total		0.543	0.124

Notes:
1. square fee (sq ft)
2. gallons per day (gpd)

The required sewer flow will be approximately 90 percent of the water demand (Brisbane Sewer Master Plan, BC, May 2003). This results in a sewer flow of approximately 0.112 mgd. The Sierra Point pump station has a future projected peak flow of 0.561 mgd. The firm capacity of the pump station is now 0.860 mgd; therefore, the additional future sewer flow of 0.112 mgd can be adequately handled by the pump station. As stated in the Sewer Master Plan, the 15-inch diameter gravity line downstream from the proposed project site will have adequate capacity in, and the 6-inch diameter force main leaving the pump station is appropriately sized.

The required fire flow for the Sierra Point Biotech Project will be established based on Division III of the 2001 California Fire Code (CFC) and with approval of the North County Fire Authority. Based on the Brisbane Water Master Plan (BC, 2003), Sierra Point will require a fire flow of 2,750 gpm for two hours. Hence, fire flow storage will

be approximately 0.330 mg. Fire flow storage for the project site will come from overall storage that the City plans for Brisbane 1 and 4, and GVMID 1 at the lower pressure zone. ↑ Guadalupe 2

Water will be supplied to the project site through existing 12-inch diameter water main on Sierra Point Parkway and a 16-inch diameter water main that runs along an easement on the southern shore of the Sierra Point Property. A 10-inch diameter water line will connect to Building A from the south. The rest of the buildings on the proposed site will be serviced through a 10-inch diameter water main loop that will run from the easement north to Sierra Point Parkway. The proposed water line layout is shown on LSA Figure III-12 from the Sierra Point Biotech Project EIR. The 10-inch diameter loop will deliver an adequate maximum daily water demand coincident with the required fire flow.

If you have any questions regarding this analysis, please call me at (925) 210-2384.

Very truly yours,

BROWN AND CALDWELL

Thomas Birmingham
Project Manager

TB:iu

cc: R. Breault, City of Brisbane
J. Flanagan, City of Brisbane
W. Faisst, Brown and Caldwell

ATTACHMENT B

Sierra Point Biotech Project EIR – Project Description, LSA Associates, Inc., May 2006

1984. This agreement for the Sierra Point property included the 1978 use permit and the Architectural Design Guidelines for Sierra Point Office Park (April 1982).[2]

The previous owner of the project site, OPUS West Corporation, drafted revised Architectural Design Guidelines for Sierra Point, which were approved by the City on March 12, 2001. Site development at that time envisioned three office buildings of six, eight, and 10 stories, a four-story parking structure, and surface parking lots. Total building square footage was estimated at 630,000 square feet. In 2005, Slough Estates International, the project applicant, began coordinating the current Sierra Point Biotech Project with the City.

The City published a revised Initial Study for the proposed project on January 13, 2006 and found that the project may have a significant effect on the environment and that an Environmental Impact Report (EIR) was required. The City then circulated a Notice of Preparation to solicit input for the scope and content of the EIR. The Planning Commission held a hearing on January 12, 2006 to receive public comment on issues related to the project and EIR. The Initial Study, Notice of Preparation, and the comments received are included as Appendix A to this Draft EIR.

C. PROJECT OBJECTIVES

The primary objectives of the proposed project are the following:

- Redevelop an underutilized site with quality research and development facilities.
- Build a project that creates desirable jobs for Brisbane.
- Generate net property tax, sales tax and other fees from the development project, and enhance property values.
- Build a project that is economically viable based upon market conditions and projected service requirements for the area.
- Maintain large portions of the site as aesthetically pleasing open space and maximize Bay views.
- Provide landscaping and improvements to the on-site portion of the regional San Francisco Bay Trail, in conformance with San Francisco Bay Conservation and Development Commission guidelines.

[City and Slough: Please refine and/or expand as necessary.]

D. PROPOSED PROJECT

This EIR considers the environmental effects of the project proposed by Slough Estates International (project applicant). This section provides a description of the proposed project based on information provided by the project applicant to redevelop the site with five buildings and one parking structure, adding up to 540,185 square feet of office/research and development space and 1,786 parking stalls in surface and garage parking. The project would include 2,500 square feet of retail space for two tenants in the first floor level of the parking structure. The project would be designed as a campus

[2] ____, 1982. Architectural Design Guidelines for Sierra Point Office Park. April. ***[City/Slough: Who authored these guidelines?]***

facility, with space for multiple tenants, and would accommodate approximately 1,800 employees. The components of the proposed project are described below. Figure III-3 depicts the site plan for the proposed project and Figure III-4 provides an illustrative aerial perspective of the proposed project when constructed.

1. Research and Development Buildings

Implementation of the proposed project would result in the construction of five three and four-story buildings (Buildings A-E) ranging in size from 90,005 square feet to 120,225 square feet, as shown in Table III-1. Four surface parking lots containing approximately 419 parking spaces would be located along the periphery of the project site. A six-level parking garage would contain 1,236 parking stalls

Based on the campus design concept, the project would provide open space areas between the buildings and pathways for east/west and north/south pedestrian movement through the interior of the site. Two focal areas would be created by the orientation of the buildings and landscape features: Buildings B and C would serve as the central visual entrance to the site along Sierra Point Parkway; Buildings D and E would provide a visual entrance as viewed from the Bay Trail along the southeastern portion of the site.

Table III-1: Structure Characteristics

Structure	# of Floors	Height (Ft.)	Total Area (Sq.Ft.)	# of Parking Spaces
Building A	3	68	90,005	0
Building B	4	85	120,225	0
Building C	4 + 1[a]	85	120,225	131
Building D	4	85	119,652	0
Building E	3	68	90,078	0
Parking Garage	6	55		1,236

[a] Below-grade parking within building.
Source: DES Architects Engineers, 2005.

Building A would be constructed on the western portion of the project site with vehicular access from Shoreline Court and Sierra Point Parkway. Building A would be located just north of the 100-foot BCDC jurisdictional line and the three-story building would have a height of 68 feet at the waterfront. The proposed building would be the smallest of the five buildings and would contain a total area of 90,005 square feet. Surface parking lots would be located to the north and west of the building, fronting Shoreline Court and Sierra Point Parkway. A representative building elevation and longitudinal section are shown in Figure III-5.

Building B would be located in the center of the project site and would have vehicular access from Sierra Point Parkway. The building would have four stories and a height of 85 feet. Building B would have 120,225 square feet of space and, along with Building C, would be the largest of the project buildings. A representative building elevation and longitudinal section are shown in Figure III-6.

Building C would be located northeast of Building B and would have vehicular access from Sierra Point Parkway at the intersection with Marina Boulevard. The building would have four stories of leasable space above ground-floor parking and would be 85 feet high. The building would have total of 120,225 square feet. A representative building elevation and longitudinal section are shown in Figure III-7.

Building D would be located directly south of the parking structure, along the eastern edge of the project site. The four-story building would have a total of 119,652 square feet and have a height of 85 feet, as shown in Figure III-8. Vehicular access to the building would also occur via parking lot

entrances on Sierra Point Parkway at the intersection with Marina Boulevard. A surface parking lot would be located east of Building D, adjacent to the Sierra Point Yacht Club and Harbor parking.

Building E would be located southwest of Building D, immediately north of the BCDC 100-foot jurisdiction line. The three-story building would be 68 feet high along the waterfront edge of the building and would have a total area of 90,078 square feet. Figure III-9 provides a representative building elevation and longitudinal section for Building E.

2. Parking Structure

The proposed parking structure would be constructed on the northeast corner of the project site at the intersection of Sierra Point Parkway and Marina Boulevard, as illustrated in Figure III-3. The six-level parking garage would provide parking for a total of 1,236 cars, with approximately 87 standard size cars and 114 compact size cars per floor. Access to the structure would be provided from Sierra Point Parkway via the surface parking lots for Buildings C and Building D. Figure III-10 provides representative garage elevations. ***[Slough: What is the square footage of the parking garage?]***

3. Retail Space

A total of 2,500 square feet of retail space would be provided on the first floor of the parking structure and would face the corner of Sierra Point Parkway and the Sierra Point Yacht Club and Brisbane Marina parking. Two retail tenants (e.g., a coffee shop or deli) would lease the space and an outdoor seating area would be located along the sidewalk.

4. Transportation, Circulation and Parking

Access to the project site would be from two entrances on Sierra Point Parkway and one entrance on Shoreline Court along the northern and western edge of the site, respectively (see Figure III-3). Circulation within the project site would occur along an internal road that parallels Sierra Point Parkway and generally runs east/west. All parking areas would be accessible via this roadway.

Table III-2: Parking

Parking	# of Spaces
Parking Garage	1,236
Building C	131
Surface Lots	419
Total	**1,786**

Source: DES Architects Engineers, 2005.

Off-street parking would be provided in four surface parking lots, sub-surface parking below Building C, and a six-level parking garage. As described above, a total of 1,786 stalls would be provided on site, as shown in Table III-2. Parking lots would be located along the external roadways and adjacent to the Sierra Point Yacht Club and Brisbane Marina parking. A public parking area with ten parking spaces for Bay Trail users would be located near the Shoreline Court entrance to the project site.

Sidewalks throughout the site would provide pedestrian access between buildings and outdoor areas and would be integrated into the site landscaping, as described below.

5. Landscaping

Landscaping of open areas and surface parking lots would cover approximately 47 percent of the project site, as shown in Figure III-11. Landscaping would be used to break up paved expanses of parking lots and to define the usability and privacy of areas.

ATTACHMENT C

San Francisco Public Utilities Commission Suburban Customers
Purchase Projections, 2005

(Original SFPUC correspondence dated May 27, 2005 with follow-up correspondence dated June 1, 2005)

SFPUC
WATER
HETCH HETCHY WATER & POWER
CLEAN WATER

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
PLANNING BUREAU
1145 Market Street, Suite 401 San Francisco, CA 94103 • Tel. (415) 934-5700• Fax (415) 934-5751

May 27, 2005

City of Brisbane
Jerry Flanagan
50 Park Lane
Brisbane, CA 94005

Dear Mr. Flanagan:

Thank you for providing us with your agency purchase estimate from the San Francisco Public Utilities Commission (SFPUC) for the years 2010, 2015, 2020 2025 and 2030. With the information you provided, the SFPUC has assessed the water supply reliability under the following planning scenarios:

- Projected Single dry-year supply for 2005;
- Projected Multiple dry-year supply beginning 2005; and
- Projected supply reliability for years 2010, 2015, 2020, 2025 and 2030.

Table 1 summarizes your agency's deliveries for projected single dry-year supply for 2005 and projected multiple dry-year supply beginning 2005.

With regards to future demands, the SFPUC will expand their water supply portfolio by increasing the types of water supply resources. Table 2 summarizes the water supply resources assumed to be available by year through 2030. This expanded supply portfolio is consistent with the SFPUC's adopted Water Supply Master Plan (2000), adopted Capital Improvement Program (2002) and Water Supply Improvement Program.

Concerning allocation of supply during dry years, the Interim Water Shortage Allocation Plan (IWSAP) was utilized to allocate shortages (1) between the SFPUC and BAWSCA agencies as a whole and (2) among BAWSCA agencies. The IWSAP was adopted in 2000 after a multi-year process of development involving a steering committee representative of all wholesale agencies. While the IWSAP is scheduled to expire in 2009, along with the Master Contract, it represents the most reasonable basis for estimating the impacts of a 20% system-wide shortage.

Finally, the SFPUC estimated the frequency and severity of anticipated shortages given projected demands and system configurations for the period 2010 through 2030. For this analysis, we assumed that the historical hydrologic period is indicative of future events and evaluated the supply reliability assuming a repeat of the actual historic hydrological period 1920 through 2002. Again, this hydrological analysis is consistent with the planning efforts that have been adopted to date by the Commission and that are currently ongoing with the development of the Water System Improvement Program. The results of that analysis are summarized in Table 3 for years 2010, 2015, 2020, 2025 and 2030.

If you have any questions or need additional information, please do not hesitate to contact me at (415) 554-0792.

Sincerely,

Paula Kehoe
Manager of Water Resources Planning

cc: Nicole Sandkulla

SAN FRANCISCO PUBLIC UTILITIES COMMISSION
PLANNING BUREAU
1145 Market Street, Suite 401 San Francisco, CA 94103 • Tel. (415) 934-5700• Fax (415) 934-5751

June 1, 2005

City of Brisbane
Jerry Flanagan
50 Park Lane
Brisbane, CA 94005

RECEIVED
JUN 02 2005
Brisbane Public Works Dept.

Dear Mr. Flanagan:

On May 27, 2005, the San Francisco Public Utilities Commission (SFPUC) sent you a letter with information pertaining to the SFPUC's water supply reliability to assist you with the development of your Urban Water Management Plan.

Upon review of the 2005 wholesale purchase projections used in the analysis, it was determined that there was a miscommunication on the figures used for the 2005 water purchase projections. The SFPUC used the average purchase estimate rather than the FY 03-04 purchase estimate shown in BAWSCA's *Attachment A-3 Sample Calculation.* Enclosed is the revised projection of FY 03-04 and is reflected in Table 1.

We apologize for any inconvenience this may have caused. Please do not hesitate to contact me if you have any questions or comments. I can be reached at (415) 554-0792.

Sincerely,

Paula Kehoe

Paula Kehoe
Manager of Water Resources Planning

cc: Nicole Sandkulla

Attachment A-3 Sample Calculation

23.6% Average Suburban Reduction from FY 03-04 Purchases

(Units in million gallons per day unless otherwise noted)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	Allocation Basis				Unadjusted Allocations					Allocations Adj. for Santa Clara & San José				
Suburban Purchasers	First Fixed Component	Second Fixed Component	Variable Component	Average	Allocation Factors	Initial Shortage Allocation	FY 03-04 Purchases	Initial Purchase Cutback		Subtotal Allocation Factors	Adjusted Shortage Allocation	Adjusted Purchase Cutback		Final Individual Share
ACWD	13.76	11.95	12.25	12.65	7.10%	9.65	12.31	-2.66	-21.63%	7.47%	9.76	-2.55	-20.72%	7.18%
Belmont	3.89	3.26	3.44	3.53	1.98%	2.69	3.52	-0.82	-23.43%	2.08%	2.72	-0.79	-22.55%	2.00%
Brisbane	0.46	0.30	0.39	0.38	0.22%	0.29	0.39	-0.10	-25.03%	0.23%	0.30	-0.09	-24.16%	0.22%
Burlingame	5.23	4.68	4.72	4.88	2.74%	3.72	4.77	-1.05	-22.07%	2.88%	3.76	-1.01	-21.17%	2.77%
Coastside	2.18	1.35	1.78	1.77	0.99%	1.35	1.89	-0.54	-28.70%	1.04%	1.36	-0.53	-27.87%	1.00%
Cordilleras	0.01	0.01	0.00	0.01	0.00%	0.00	0.01	0.00	-24.99%	0.00%	0.00	0.00	-24.12%	0.00%
CWS Total	35.50	33.51	36.21	35.07	19.68%	26.74	38.25	-11.51	-30.08%	20.70%	27.05	-11.20	-29.27%	19.90%
Daly City	4.49	4.49	4.72	4.57	2.56%	3.48	4.94	-1.46	-29.53%	2.70%	3.52	-1.42	-28.71%	2.59%
East Palo Alto	2.18	2.10	2.09	2.12	1.19%	1.62	2.19	-0.58	-26.22%	1.25%	1.64	-0.56	-25.37%	1.20%
Estero	7.23	5.45	5.49	6.06	3.40%	4.62	5.58	-0.96	-17.17%	3.58%	4.67	-0.90	-16.21%	3.44%
Guadalupe	0.52	0.27	0.33	0.38	0.21%	0.29	0.33	-0.04	-13.01%	0.22%	0.29	-0.04	-12.00%	0.21%
Hayward	24.00	17.56	18.30	19.95	11.19%	15.22	19.59	-4.38	-22.35%	11.78%	15.39	-4.20	-21.45%	11.32%
Hillsborough	4.09	3.60	3.78	3.82	2.14%	2.92	3.91	-1.00	-25.53%	2.26%	2.95	-0.97	-24.67%	2.17%
Los Trancos*														0.00%
Menlo Park	4.24	3.43	3.58	3.75	2.10%	2.86	3.84	-0.98	-25.56%	2.21%	2.89	-0.95	-24.69%	2.13%
Millbrae	3.15	2.64	2.39	2.73	1.53%	2.08	2.58	-0.50	-19.25%	1.61%	2.11	-0.47	-18.31%	1.55%
Milpitas	9.23	6.80	6.94	7.66	4.30%	5.84	7.10	-1.27	-17.83%	4.52%	5.91	-1.20	-16.87%	4.34%
Mountain View	13.46	10.36	10.91	11.58	6.50%	8.83	10.96	-2.13	-19.42%	6.83%	8.93	-2.03	-18.49%	6.57%
North Coast	3.84	3.29	3.48	3.54	1.98%	2.70	3.59	-0.89	-24.81%	2.09%	2.73	-0.86	-23.94%	2.01%
Palo Alto	17.07	12.96	13.06	14.37	8.06%	10.95	13.33	-2.38	-17.85%	8.48%	11.08	-2.25	-16.90%	8.15%
Purissima Hills	1.85	1.85	2.19	1.96	1.10%	1.49	2.31	-0.81	-35.22%	1.16%	1.51	-0.79	-34.47%	1.11%
Redwood City	10.93	10.92	11.73	11.19	6.28%	8.53	12.16	-3.63	-29.82%	6.61%	8.63	-3.53	-29.00%	6.35%
San Bruno	3.25	2.01	2.43	2.56	1.44%	1.95	2.41	-0.46	-18.97%	1.51%	1.97	-0.43	-18.03%	1.45%
Skyline	0.18	0.16	0.17	0.17	0.10%	0.13	0.18	-0.05	-28.57%	0.10%	0.13	-0.05	-27.74%	0.10%
Stanford	3.03	2.58	2.43	2.68	1.50%	2.04	2.51	-0.47	-18.78%	1.58%	2.07	-0.45	-17.83%	1.52%
Sunnyvale	12.58	10.73	9.56	10.95	6.14%	8.35	9.84	-1.49	-15.15%	6.46%	8.45	-1.39	-14.17%	6.22%
Westborough	1.32	0.98	1.01	1.10	0.62%	0.84	0.97	-0.13	-12.98%	0.65%	0.85	-0.12	-11.97%	0.63%
Subtotal	187.67	157.23	163.38	169.43		129.20	169.48	-40.28	-23.77%	100.00%	130.70	-38.78	-22.88%	
San José	2.68	4.10	4.65	3.81	2.14%	2.91	4.84	-1.94	-40.03%		2.91	-1.94	-40.03%	2.14%
Santa Clara	6.57	4.72	3.77	5.02	2.82%	3.83	3.59	0.23	6.51%		2.33	-1.27	-35.22%	1.71%
Total	196.92	166.06	171.80	178.26	100.00%	135.93	177.92	-41.99	-23.60%		135.93	-41.99	-23.60%	100.00%

Derivation of the Santa Clara/San José adjustment:

1.	Largest permanent customer cutback:	-35.22%
2a.	Adjusted Santa Clara shortage allocation:	2.33 (Applying largest permanent customer cutback)
2b.	Santa Clara adjustment:	-1.50 (Difference between initial and adjusted alloc.)
3a.	Adjusted San José shortage allocation:	3.14 (Applying largest permanent customer cutback)
3b.	San José adjustment:	0.00 (Difference between initial and adjusted alloc.)
4.	Total Adjustment:	-1.50 (2b + 3b)

*All values associated with Los Trancos County Water District have been included within Cal Water value

Attachment A-3. Suburban Shortage Allocations

Assumptions and Column Notes

Avg. Shortage for the Suburban Purchasers = 23.6%
Water available to the Suburban Purchasers = 135.93 mgd

Column notes:

Allocation Basis. The Allocation Basis is used for calculating Allocation Factors and is the average of the following three components:

1. First Fixed Component: The greater of either the Supply Assurance values or the three-year average of SFPUC purchases for FYs 1996-97, 1997-98, and 1998-99, with certain exceptions.
   a. Daly City's and Purissima Hill's values are based on their three-year averages, which is greater than their Supply Assurance values.
   b. Hayward's and Estero's values are based on their 2010-11 projected purchases, as reported in the BAWUA 1997-98 Annual Survey.
   c. San José's and Santa Clara's values are based on the water supply caps in their individual water supply contracts with the SFPUC.
2. Second Fixed Component: The average of SFPUC purchases for FYs 1996-97, 1997-98, and 1998-99.
3. Variable Component: The rolling three-year average, updated annually, beginning with FYs 1996-97, 1997-98, and 1998-99.
4. Average: The average of columns 1, 2, and 3.

Unadjusted Allocations. The initial shortage allocations in column 6 are adjusted for Santa Clara and San José in columns 10 through 13.

5. Allocation Factors: The ratio of each Suburban Purchaser's column 4 average to the column 4 total.
6. Initial Shortage Allocation: The product of each Suburban Purchaser's column 5 Allocation Factor times the column 6 total, which represents the assumed available water supply.
7. FY 2003-04 Purchases: The most recent year's purchases to which the Shortage Allocation can be compared to determine the effective cutback.
8. Purchase Cutback: Column 6 minus column 7, in mgd.
9. Purchase Cutback: The ratio of column 8 to column 7, in percent.

Allocations Adjusted for Santa Clara and San José. This adjustment is made so that Santa Clara's and San José's cutbacks are at least as great as the highest cutback by the permanent customers. In this example, there is no adjustment required for San José because the formula results in an unadjusted cutback that is already greater than the highest cutback by a permanent customer.

10. Subtotal Allocation Factors: The ratio of each permanent Suburban Purchaser's column 4 average to the column 4 subtotal.
11. Adjusted Shortage Allocation: The product of each Suburban Purchaser's column 10 Subtotal Allocation Factor times the Column 11 subtotal.
    a. The column 11 subtotal is the sum of the column 6 subtotal plus the Santa Clara adjustment.
    b. The Santa Clara adjustment is the difference between its column 6 Initial Shortage Allocation and its Adjusted Shortage Allocation.
    c. Santa Clara's Adjusted Shortage Allocation is the product of its column 4 average and the largest Purchase Cutback received by the permanent Suburban Purchasers.
12. Adjusted Purchase Cutback: Column 11 minus column 7, in mgd.
13. Adjusted Purchase Cutback: The ratio of column 12 to column 7, in percent.

Table 1
Projected Brisbane, City of Deliveries for Three Multiple Dry Years Given Year 2005 Purchase Request

	Purchase Request Year 2005 mgd	One Critical Dry Year	Current Deliveries during Multiple Dry Years in mgd		
			Year 1	Year 2	Year 3
System-Wide Shortage in Percent	0%	10%	10%	20%	20%
BAWSCA Allocation mgd	177.9	157.4	157.4	136.8	136.8
Brisbane, City of	0.39	0.34	0.34	0.30	0.30

Table 2

UWMP Studies: Water Supply Reliability
Water Supply Options for Years 2010 through 2030

	2010	2015	2020	2025	2030
Crystal Springs Reservoir (22bg)	x	x	x	x	x
Westside Basin Groundwater afa	4,500	7,000	8,100	8,100	8,100
Calaveras Reservoir Recov. (31.5 bg)		x	x	x	x
Districts' Transfer afa	23,200	23,200	29,000	29,000	29,000

Allocation	SFPUC Purchase: Brisbane, City of mgd					SFPUC Purchase: All Wholesale Customers mgd				
Delivery for Year beginning July 1	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.8	209.4
	Projected Delivery in mgd					Projected System-wide Delivery in mgd				
	2010	2015	2020	2025	2030	2010	2015	2020	2025	2030
1920	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1921	0.70	0.75	0.80	0.85	0.89	188.9	191.8	197.5	203.6	209.4
1922	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1923	0.70	0.75	0.80	0.85	0.89	188.9	191.8	197.5	203.6	209.4
1924	0.70	0.75	0.80	0.85	0.50	188.9	191.6	197.5	203.6	185.7
1925	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1926	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1927	0.70	0.75	0.80	0.85	0.89	188.9	191.8	197.5	203.6	209.4
1928	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1929	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1930	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1931	0.45	0.45	0.47	0.48	0.43	167.3	169.7	175.0	180.5	161.9
1932	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1933	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1934	0.45	0.75	0.80	0.85	0.50	167.3	191.6	197.5	203.6	185.7
1935	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1936	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1937	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1938	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1939	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1940	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1941	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1942	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1943	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1944	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1945	0.70	0.75	0.80	0.85	0.89	188.9	191.8	197.5	203.6	209.4
1946	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1947	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1948	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1949	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1950	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1951	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1952	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1953	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1954	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1955	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1956	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1957	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1958	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1959	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1960	0.70	0.75	0.80	0.85	0.50	188.9	191.6	197.5	203.6	185.7
1961	0.45	0.45	0.47	0.42	0.43	167.3	169.7	175.0	157.4	161.9
1962	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1963	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1964	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1965	0.70	0.75	0.80	0.85	0.89	188.9	191.8	197.5	203.6	209.4
1966	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1967	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1968	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1969	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1970	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1971	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1972	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1973	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1974	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1975	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1976	0.70	0.75	0.80	0.85	0.50	188.9	191.6	197.5	203.6	185.7
1977	0.39	0.45	0.47	0.42	0.43	145.6	169.7	175.0	157.4	161.9
1978	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1979	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1980	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1981	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1982	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1983	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1984	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1985	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1986	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1987	0.70	0.75	0.80	0.85	0.50	188.9	191.6	197.5	203.6	185.7
1988	0.45	0.45	0.47	0.48	0.43	167.3	169.7	175.0	180.5	161.9
1989	0.45	0.45	0.47	0.48	0.50	167.3	169.7	175.0	180.5	185.7
1990	0.39	0.45	0.41	0.42	0.43	145.6	169.7	152.5	157.4	161.9
1991	0.39	0.45	0.47	0.42	0.43	145.6	169.7	175.0	157.4	161.9
1992	0.39	0.40	0.41	0.42	0.43	145.6	147.8	152.5	157.4	161.9
1993	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1994	0.70	0.75	0.80	0.85	0.50	188.9	191.6	197.5	203.8	185.7
1995	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1996	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1997	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1998	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
1999	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
2000	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4
2001	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.8	209.4
2002	0.70	0.75	0.80	0.85	0.89	188.9	191.6	197.5	203.6	209.4

ATTACHMENT D

1993 General Plan: Environmental Impact Report Volume 1

1999-2006
HOUSING ELEMENT

CITY OF BRISBANE
50 PARK PLACE
BRISBANE, CA 94005

ADOPTED BY THE CITY COUNCIL
10/15/02

Table 26.

1999-2006 Zoning Capacity

Subarea/Zoning District

CENTRAL BRISBANE

Total Area: 165+/- gross acres, including 12+/- gross acres in the R-3 District (excluding the Community Park and Brisbane Elementary School) and 9+/- gross acres in the NCRO-2 District (excluding the Community Park)

Constraints: Limited arterial access; long dead-end streets; bottlenecks due to narrow streets, sharp curves, steep grades and on-street parking; wildland fire hazards in specific areas; aging sewer lines; susceptibility to landslide in specific areas; potential to experience very strong shock and possible liquefaction during an earthquake in specific areas; some soils subject to erosion and slippage

Residential Uses: Permitted at 1 unit per 5,000 sq. ft. in the R-1 District, 1 unit per 2,500 sq. ft. in the R-2 District and 1 unit per 1,500 sq. ft. in the R-3 District; conditionally permitted in the NCRO-2 District as part of a mixed-used project, with no maximum density

	Number of Units	
	Maximum*	Adjusted**
R-1 District (8.8 acres vacant)		
Units under construction since 1/1/99	9	9
Standard vacant sites	19	19
Substandard vacant sites	14	14
Unrecorded vacant subdivisions	14	14
Variance for vacant site	1	1
Amend Substandard Lot provisions	14	14
Secondary units on vacant and developed sites	327	201
R-2 District (0.1 acre vacant)		
Substandard vacant sites	1	1
Partially developed sites	4	4
Aggregation/Replacement	25	25
R-3 District (0.4 acre vacant)		
Units under construction since 1/1/99	4	4
Vacant standard sites	9	9
Combined vacant sites	1	1
Vacant substandard sites	1	1
Partially developed sites	9	6
Aggregation /Replacement	65	48
Rezone 4 sites in R-1 District	23	23
NCRO-2 District (0 acres vacant)		
Units under construction since 1/1/99	N/A	15
Underutilized sites for mixed-use projects	N/A	19

(Continued on following page)

Table 26.

1999-2006 Zoning Capacity
(Continued from previous page)

Subarea/Zoning District

BRISBANE ACRES

Total Area:	132+/- gross acres (including 9.4 acres conserved)
Constraints:	High-to-extreme fire hazards; soils subject to slippage and erosion; susceptibility to landslides and debris flows in specific areas; traffic noise impacts in specific areas; endangered species habitat; steep terrain; streets and utilities lacking or below-standard in most areas
Residential Uses:	Permitted at 1 unit per 20,000 sq. ft.

	Number of Units	
	Maximum*	Adjusted**
R-BA District (108.5 acres vacant, not conserved)		
Vacant sites	236	35
Units through Transferable Development Rights	0	134

NORTHEAST RIDGE

Total Area:	228 gross acres (including 135.3 acres conserved)
Constraints:	Endangered species habitat; soils subject to slippage and erosion; susceptibility to landslides and intense ground-shaking during earthquakes in specific areas; debris flows in specific areas; wildland fire hazards; traffic noise impacts in specific areas
Residential Uses:	Permitted at 1 unit per 2,890 sq. ft. in Altamar at the Ridge, 1 unit per 3,998 sq. ft. in Viewpoint at the Ridge, and 1 unit per 7,410 sq. ft. in Landmark at the Ridge

	Number of Units	
	Maximum*	Adjusted**
PD District (28.2 acres vacant, not conserved)		
Units under construction since 1/1/99	294	294
First Phase: Single-Family Units	37	37
Second Phase: Single-Family Units	60	60
Second Phase: Multi-Family Units	108***	0

(Continued on following page)

Table 26.

1999-2006 Zoning Capacity
(Continued from previous page)

Subarea/Zoning District

SOUTHWEST BAYSHORE

Total Area:	19+/- gross acres
Constraints:	Steep slopes susceptible to landsliding and erosion in specific areas; wildland fire hazards in specific areas; susceptibility to liquefaction during an earthquake in specific areas; endangered species habitat; traffic noise impacts
Residential Uses:	Conditionally permitted in this mixed-use district at up to 1 unit per 1,5000 sq. ft.

	Number of Units	
	Maximum*	Adjusted**
SCRO-1 District (6.5 acres vacant)		
Units under construction since 1/1/99	1	1
4 vacant sites with upzoning of R-1-20,000 portion	162	81
Combine and reuse 15 underutilized sites for mobilehomes (Adjusted assumes repeal of unit density standards)	52	87

QUARRY

Total Area:	145 gross acres
Constraints:	Endangered species habitat; regrading of approximately 86.4 acres; lack of sewer service; limited access; need for storm drainage and water service upgrades
Residential Uses:	Proposed to be permitted under a Planned Development at an average of 1 unit per 3,960 sq. ft.

	Number of Units	
	Maximum*	Adjusted**
PD District (proposed) (19 acres for development)		
Underutilized site proposed for development	N/A	undetermined

NORTHWEST BAYSHORE

Total Area:	72+/- gross acres
Constraints:	Endangered species habitat; wildland fire hazard; steep slopes subject to erosion; risk of seismically induced landslides; debris flows; traffic noise impacts; limited access, utilities and storm drainage infrastructure
Residential Uses:	Conditionally permitted as part of a mixed-use project; density to be determined as part of future Planned Development

	Number of Units	
	Maximum*	Adjusted**
PD District (31.3 acres vacant)		
Vacant sites	N/A	undetermined

(Continued on following page)

Table 26.

1999-2006 Zoning Capacity
(Continued from previous page)

	Total Number of Units	
	Maximum*	Adjusted**
TOTAL CAPACITY	1,490***	1,157

*Based upon maximum density under current or proposed zoning district regulations, under conditions detailed in text. Includes 308 units built since 1/1/99.
**Based upon density of actual, approved or proposed projects, under conditions detailed in text, not including the potential for 25% density bonus under State law (note that Housing Element policy could allow greater bonus). Includes 323 units built since 1/1/99.
***Including 108 units in the Northeast Ridge subarea projected not to be developed until after 2006 (see text).
N/A No maximum density set under current zoning district regulations.

CITY OF BRISBANE

1993 GENERAL PLAN

ENVIRONMENTAL IMPACT REPORT

VOLUME I: ENVIRONMENTAL SETTING

DECEMBER 1993

Prepared for
City of Brisbane

Prepared by
Thomas Reid Associates
Palo Alto, California

Noise contours of CNEL 65 dB or more are found within 1400 feet of Highway 101 to the east and within 150 feet of the railroad tracks to the west of the subarea. The portion of the subarea that is landfill is subject to very intense ground-shaking and liquefaction during earthquakes.

D. DEMOGRAPHIC SETTING

1. Housing and Income

The Table 5 provides a comparison of Brisbane's 1980 demographic data with 1990 data based on the results of the U.S. Census.[70]

TABLE 5 -- COMPARISON OF 1980 AND 1990 DEMOGRAPHIC DATA

	1990	1980	CHANGE
POPULATION	2,952	2,969	-17
HOUSEHOLDS (HH)	1,313	1,362	-49
AVERAGE NUMBER OF PERSONS PER HH	2.24	2.18	+9
MEDIAN AGE IN YEARS	35.7	33.6	+2.1
MEDIAN INCOME	$38,368	$19,618	+ $18,750

2. Employment

Brisbane has compiled the following employment information based on the census and business surveys:

Employed Persons Living in Brisbane

Total	1,687
Work at their home in Brisbane	209
Work outside their home in San Mateo County	601
Work outside of San Mateo County	877

Existing Employment Estimates, City of Brisbane

Crocker Park	3,800
Koll Center, Sierra Point	875
Tunnel & Beatty Avenues	420
Industrial Way	350
Visitacion & San Bruno Avenues	75
Brisbane Village Shopping Center	60
Bayshore Boulevard	406
Total	**5,986**

[70] See GP-2 and GP-3.

CITY OF BRISBANE

1993 GENERAL PLAN

ENVIRONMENTAL IMPACT REPORT

VOLUME II: DRAFT EIR

JANUARY 1994

Prepared for
City of Brisbane

Prepared by
Thomas Reid Associates
Palo Alto, California

State Clearinghouse #93071072

TABLE IA-14 -- POPULATION AND EMPLOYMENT INCREASE ASSOCIATED WITH 1993 GENERAL PLAN 10-YEAR HORIZON**

SUBAREA	NEW RESIDENTIAL POPULATION[a]	NEW EMPLOYMENT[b]
1. Sierra Point	0	1,512
2. SE Bayshore	0	0
3. SW Bayshore Alt I Alt II	 0 0	 20 0
4. Brisbane Acres	11	0
5. Central Brisbane	121	0
6. Owl/Buckeye Canyons	0	0
7. Quarry	0	0
8. Crocker Park	0	148
9. NE Ridge	1,297	
10. NW Bayshore Alt I Alt II Alt III Alt IV	 0 58 0 58	 213 284 290 0
11. Northeast Bayshore	0	0
12. Baylands	0	1200
13. Candlestick Cove	0	0
Citywide Total	1,429 - 1,487	2,860 - 3,170
14. Existing	2,952	5,986[c]
Total (Ten Year + Existing)	4,381 - 4,439	8,846 - 9,156
Percent Increase from Present	48% - 50%	48% - 53%

[a] At 2.24 persons/DU

[b] See detail in **Employment Calculation Assumptions** (Appendix 4).

[c] Source: City of Brisbane, Volume I: Environmental Setting, General Plan Update Background Report, November 1993.

** See Appendix 4.

TABLE IA-19 -- POPULATION AND EMPLOYMENT INCREASE BEYOND TEN YEAR INCREMENT

SUBAREA	NEW POPULATION	NEW EMPLOYMENT
1. Sierra Point	0	4,547
2. SE Bayshore	0	0
3. SW Bayshore Alt I Alt II	 78	 160 0
4. Brisbane Acres	459	0
5. Central Brisbane	226	0
6. Owl/Buckeye Canyons	0	0
7. Quarry	See text in subarea analysis	
8. Crocker Park	0	0
9. NE Ridge	0	0
10. NW Bayshore Alt I Alt II Alt III Alt IV	 0 22 0 220	 167 118 104 0
11. Northeast Bayshore	0	0
12. Baylands Alt I Alt II Alt III	0	See text in citywide analysis
13. Candlestick Cove	0	0
Citywide Total w/o Baylands long-term + quarry	685 - 983	4,547 - 4,874

APPENDIX 6
EMPLOYMENT CALCULATIONS

The employment figures calculated for the land use square footages in the following tables EMPLOYMENT-1 through EMPLOYMENT-4 were calculated using the following factors. These factors were obtained from the economics consulting firm Economic and Planning Systems, who also prepared the report Economic Analysis of Prototype Land Use Developments for the Brisbane General Plan Update (Report EC-3).

EMPLOYMENT FACTORS USED IN TABLES:

Retail --

Neighborhood retail= 600 sf/employee

"Big box" retail = 810 sf/employee

Office -- 310 sf/employee

Hotel -- 1.65 rooms/employee

Restaurant = 600 sf/employee

R&D -- 450 sf/employee

Trade commercial = 810 sf/employee

In some cases, as shown in the footnote annotations, the employment figures were calculated assuming a portion of the square footage at one employment factor (e.g. trade commercial) and a portion at another (e.g. R&D). The employment figures in the following tables are rough estimates only, based on generic factors and assumptions about land use square footage distribution. They are to be used for planning purposes for comparison among alternatives but are not supposed to represent actual future conditions, which could differ substantially from the numbers shown.

TABLE EMPLOYMENT-2
1993 GENERAL PLAN -- 10-YEAR SCENARIO

	Subarea	Retail	Office	Hotel/ Restaurant	R&D/ Trade Commercial;	Total
1.	Sierra Point		352,000 sf 1135 empl.	8,000 sf restaurant 600-room hotel 377 empl.[4]		360,000 sf 600 room hotel 1,512 empl.
2.	Southeast Bayshore	No intensification of land use				
3.	Southwest Bayshore Alt I	4,300 sf 7 empl.	1,200 sf 4 empl.		7,400 sf trade commercial 9 empl.	12,900 sf 20 empl.
	Alt II					
4.	Brisbane Acres					
5.	Central Brisbane					
6.	Owl/Buckeye Canyons	no urban development				
7.	Quarry	no intensification or change of use anticipated				
8.	Crocker Park	conversion 5,000 sf to health club/outlets 8 empl.[5]		conversion 3,000 sf to restaurant 5 empl.	120,140 sf** 148 empl.	120,140 sf[6] Total Conversion: 8,000 sf 161 empl. (148 new)
9.	Northeast Ridge					
10.	Northwest Bayshore: Alternative I	120,000 sf 200 empl.		8,000 sf 13 empl.		128,000 sf 213 empl.
	Northwest Bayshore: Alternative II				128,000 sf* 284 empl.[7]	128,000 sf 284 empl.

[4] 8,000 sf restaurant/600 sf per employee = 13 employees
600 room hotel/1.65 rooms/employee = 364 employees
13+364 = 377 total employees

[5] Health Club outlet assumed 600 sf/employee = same as neighborhood retail.

[6] 120,140 sf/810 sf/employee = 148 employees, using the factor for trade commercial.

[7] 284 employees was calculated using the R&D factor of 450 sf/employee.
128,000/450 = 284 employees

	Subarea	Retail	Office	Hotel/ Restaurant	R&D/ Trade Commercial;	Total
	Northwest Bayshore: Alternative III				168,000 sf* 290 empl.[8]	168,000 sf 290 empl.
	Northwest Bayshore: Alternative IV					
11.	Northeast Bayshore	no intensification or land use change anticipated				
12.	Baylands	450,000 sf 556 empl.[9]			lab building 200,000 sf[10] 645 empl.	650,000 sf 1201 empl.
13.	Candlestick Cove					
	Totals	455,300-579,300 sf 571-778 empl.	352,000-353,200 sf 1135-1139 empl.	11,000 sf-19,000 sf restaurants 600-room hotel 382-395 empl.	320,140-495,540 sf 793-1,092 empl.	1.130-1.311 msf. 2,861-3,171 empl.***

* Could include storage and distribution, commercial recreation such as skating rink, bowling alley, movie theater, driving range.

** Could be reduced because of need to first fill upcoming vacancies.

*** New employment only; does not include conversion employment.

[8] Was calculated assuming half of the space was R&D @ 450 sf/employee and half was trade commercial @ 810 sf/employee.

[9] Calculated using all big box retail factor of 810 sf/employee.
450,000/810 = 555 employees

[10] Calculated using the factor for office space of 310 sf/employee.
200,000/310 = 645

TABLE EMPLOYMENT-3
1993 GENERAL PLAN -- BEYOND 10-YEAR INCREMENT

	SUBAREA	Retail	Office	Hotel Restaurant	R&D, Trade Commercial	Total
1.	Sierra Point	42,000 sf 70 empl.	1.294 msf 4177 empl.	500 rooms 303 empl.		1.336 msf 500 rooms 4,550 empl.
2.	Southeast Bayshore	no intensification of land use				
3.	Southwest Bayshore Alt I	30,700 sf 51 empl.	2,300 sf 7 empl.		59,100 sf[11] 102 empl.	92,100 sf 160 empl.
	Alt II					
4.	Brisbane Acres					
5.	Central Brisbane					
6.	Owl/Buckeye Canyons	no urban development				
7.	Quarry					
	Alt I					health care facilities; educational facilities;
	Alt II					commercial recreation;
	Alt III					trade comm. R&D;
8.	Crocker Park					0
9.	Northeast Ridge					
10.	Northwest Bayshore: Alternative I	100,000 sf 167 empl.				100,000 sf 167 empl.
	Northwest Bayshore: Alternative II				68,000 sf 118 empl.[12]	68,000 sf 118 empl.
	Northwest Bayshore: Alternative III				60,000 sf 104 empl.[13]	60,000 sf 104 empl.

[11] Calculated assuming one half of the space is at R&D factor of 450 sf/employee and half the space is trade commercial factor of 810 sf/employee.

[12] Calculated assuming half of the space is at R&D factor of 450 sf/employee and half is at trade commercial factor of 810 sf/employee.

[13] Calculated assuming half of the space is at R&D factor of 450 sf/employee and half is at trade commercial factor of 810 sf/employee.

	SUBAREA	Retail	Office	Hotel Restaurant	R&D, Trade Commercial	Total
	Northwest Bayshore: Alternative IV					
11.	Northeast Bayshore	no intensification or land use change anticipated				
12.	Baylands					
	Alt I	small stores and shops commercial services	office	hotel/ resort/ restaurant/golf course	bulk sales; statuary;lagoon/ bayfront; recreation; public/semi-public; educational institution biotechnology	
	Alt II	medium-size shopping center commercial services	office	hotel/ resort/ restaurant golf course	R&D; bulk sales; statuary; lagoon/ bayfront; recreation; golf course; public/semi-public; educational institution biotechnology	
	Alt III	major shopping center commercial services	office	hotel/ resort/ restaurant golf course	R&D; bulk sales; statuary; lagoon/ bayfront; recreation; golf course; public/semi-public; educational institution* biotechnology	
13.	Candlestick Cove	no intensification or change of use anticipated				
	Totals (exclusive of Baylands)	42,000 - 172,700 sf 70 - 288 empl.	1.294 msf - 1.296 msf 4177 - 4184 empl.	500 rooms 303 empl.	0 - 127,100 sf 0 - 220 empl.	1.336 msf- 1.596 msf 500 rooms 4,550 - 4,877 empl.

ATTACHMENT E

1984 Master Sales Agreement between Suburban Purchasers and the City and County of San Francisco

03-04-01

SETTLEMENT AGREEMENT

and

MASTER WATER SALES CONTRACT

between

THE CITY AND COUNTY OF SAN FRANCISCO

and

CERTAIN SUBURBAN PURCHASERS

in

SAN MATEO COUNTY, SANTA CLARA COUNTY
AND ALAMEDA COUNTY

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SETTLEMENT AGREEMENT
AND MASTER WATER SALES CONTRACT

The purpose of this Settlement Agreement and Master Water Sales Contract ("Agreement") is to memorialize the understanding which the City and County of San Francisco ("the City") and certain of its suburban water purchasers have reached regarding the settlement of that certain civil action ("the action") entitled *City of Palo Alto, et al. v. City and County of San Francisco,* presently pending in the United States District Court for the Northern District of California as No. C 74 1997 RHS. This Agreement is also intended to serve as the document governing the rights and obligations of the City and these and certain other suburban water purchasers as a group, and shall be incorporated by reference into individual water supply contracts ("the Individual Contracts") between the City and each such purchaser.

The action was originally instituted in 1974, when a Complaint for Injunction and Declaratory Relief was filed, together with a Motion for Preliminary Injunction and Temporary Restraining Order. The precipitating event which caused the filing of the Complaint was the decision by the City to increase suburban water rates 20.5% while increasing in-City rates 14.5%. Plaintiffs successfully obtained a preliminary injunction barring this rate increase, which was affirmed on appeal in 1977. *City of Palo Alto v. City and County of San Francisco,* 548 F.2d 1375 (9th Cir. 1977). In 1976, Plaintiffs obtained another preliminary injunction against the City, barring the City from instituting a certain "lifeline" rate, the effect of which was disproportionately to lower rates to in-City water users.

In 1978, Plaintiffs filed an Amended and Supplemental Complaint in the action. While the prior Complaint and Motions for Preliminary Injunction had been directed specifically against certain impending rate increases, the Amended and Supplemental Complaint substantially broadened the scope of the action into an attack upon the historic method by which the City has charged suburban cities and other public entities for water. The Amended and Supplemental Complaint charged that the City's long-standing rate-setting practices violated the Raker Act, 38 Stat. 242 (1913) (hereinafter sometimes referred to as "the Act"), in a number of different respects. The Complaint sought declaratory relief regarding the rights and obligations of Plaintiffs and the City under the Act, an injunction prohibiting the City from charging unreasonable, arbitrary or discriminatory rates, and restitution by the City to Plaintiffs of any amounts charged them for water found to be in violation of the Act.

Throughout the action, the City has denied that Plaintiffs are entitled to any relief and contended that: (a) the Raker Act affords Plaintiffs no private right of action; (b) the Raker Act does not require that the City sell water to Plaintiffs at cost, but merely that the City's water rates conform to state law; and (c) the rates charged the suburban purchasers for water have been and continue to be legal under state and federal law. The City has filed a Motion for Summary Judgment based upon the first two of these claims, which is presently pending before the District Court.

During the course of the action, the parties have engaged in extensive settlement negotiations in an effort to resolve their outstanding differences amicably and provide a new framework for their future relationship. This Agreement is the product of those negotiations, and reflects the understandings which the parties hereto have reached in their efforts to settle the action. As will also be seen hereafter, this Agreement provides that certain issues as to which the parties possess conflicting views will not be resolved by this Agreement, and this Agreement shall not be construed as a concession by any signatory thereto as to any such specifically reserved issue.

The terms of the Agreement reached between the parties are as follows:

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ARTICLE I

PARTIES

Section I.01. *Parties.*

The parties to this Agreement are the City and County of San Francisco and such of the following entities (all of whom purchase water from the City) as have executed this Agreement:

(a) The City of Palo Alto, City of Redwood City, City of Burlingame, City of Menlo Park, City of Hayward, City of San Bruno, City of Daly City, Alameda County Water District, Coastside County Water District, North Coast County Water District, Belmont County Water District, Skyline County Water District, Purissima Hills Water District, East Palo Alto County Waterworks District and the San Mateo County Waterworks District No. 3, all of whom shall hereafter collectively be referred to as "Plaintiffs";

(b) The Estero Municipal Improvement District, Town of Hillsborough, City of Millbrae, Westborough County Water District, City of Brisbane, Guadalupe Valley Municipal Improvement District, Los Trancos County Water District, City of Sunnyvale, Cordilleras Mutual Water Association, The Board of Trustees of The Leland Stanford Junior University ("Stanford University"), City of Mountain View, City of Milpitas, City of Santa Clara, City of San Jose, and the California Water Service Company.

The entities listed above in groups (a) and (b) which have executed this Agreement shall collectively be referred to as the "suburban purchasers".

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ARTICLE II

EFFECTIVE DATE, DISPOSITION OF ACTION, RELEASE OF PAST MONETARY CLAIMS, RESERVATION OF "CO-GRANTEE" CLAIMS AND DISMISSAL OF CLAIM RE INTRA-CITY FUND TRANSFERS

Section 2.01. *Effective Date.*

Except as hereinafter provided, this Agreement shall become effective only when it has been duly approved by the City and by each of the entities listed in Section 1.01(a) and (b) ("listed entities") and when the City and each of these listed entities (except for the City of Hayward and the Estero Municipal Improvement District) have entered into an Individual Contract, as provided in Section 9.01. If the City and all listed entities approve this Agreement and (except for the City of Hayward and the Estero Municipal Improvement District) an Individual Contract by May 25, 1984, the effective date shall be May 25, 1984.

If, by May 25, 1984, this Agreement has been approved by fewer than all of the listed entities and/or fewer than all of the listed entities have entered into Individual Contracts with the City, then the effectiveness of this Agreement shall be determined as follows:

(a) If suburban purchasers representing at least 80 percent in number (24) and 80 percent of the quantity of water purchased from the City by all the listed entities in calendar year 1981 (57,947,464 ccf) have approved this Agreement and (if required) their Individual Contracts, then the City shall have the option to waive its right under this section to require that all listed entities have approved this Agreement and an Individual Contract as a condition precedent to this Agreement and any Individual Contract becoming effective. The City shall have 20 days from May 25, 1984 within which to elect to waive the condition and to send notice to the listed entities which have approved this Agreement of its waiver. If the City elects to waive the condition, then those listed entities which have approved this Agreement and Individual Contracts shall be bound thereby and this Agreement and the Individual Contracts shall become effective, as of the date of the City's election, as to them. For purposes of determining whether the suburban purchasers which have approved this Agreement represent 80 percent or more of the water purchased during 1981 (i.e., 57,947,464 ccf or more), the quantity of water attributable to each listed entity shall be as set forth in Exhibit K-2.

(b) If listed entities representing less than 80 percent in number and quantity of water purchased have approved this Agreement and (if required) their Individual Contracts, then both the City and those listed entities which have signed this Agreement and Individual Contracts shall have the option to waive its and their rights under this Section to require that all listed entites have approved this Agreement and an Individual Contract as a condition precedent to this Agreement and any Individual Contract becoming effective. This option shall be exercised in the following manner. First, the City shall send notice, on or before June 1, 1984, to each listed entity which has approved this Agreement and an Individual Contract on or before May 25, 1984 of the names of all of the listed entities which have also approved this Agreement and an Individual Contract. Second, each of the listed entities which has approved this Agreement and an Individual Contract on or before May 25, 1984 shall notify the City of its decision to waive the condition by June 22, 1984. Third, if the City then elects to waive the condition, it shall notify each listed entity which has signed this Agreement and an Individual Contract of its election no later than August 7, 1984, and this Agreement and the Individual Contracts shall then become effective as to each listed entity which has elected to waive the condition, as of August 7, 1984.

(c) Notwithstanding anything in Sections 2.01(a) and (b) to the contrary, this Agreement shall not become effective unless signed by each and every Plaintiff, except as provided herein:

(1) If all Plaintiffs sign the Stipulation for Dismissal with Prejudice provided for in Section 2.02 by May 25, 1984, then the City may waive this condition by giving written notice of waiver to each listed entity no later than August 7, 1984. If this condition is thus waived,

then the effectiveness of this Agreement shall be determined under Section 2.01(a) or (b), whichever is applicable.

(2) If any Plaintiff has not signed the Stipulation for Dismissal with Prejudice provided for in Section 2.02 by May 25, 1984, then both the City and those listed entities which have signed this Agreement and an Individual Contract shall have the option to waive this condition. The option shall be exercised in the same manner as that specified in Section 2.01(b), *mutatis mutandis*. If this condition is waived pursuant to this subsection, then the effectiveness of this Agreement shall be determined under Section 2.01(a) or (b), whichever is applicable.

(d) If this Agreement becomes effective pursuant to either Section 2.01(a) or 2.01(b), then the Supply Assurance defined in Section 7.01 shall be reduced by the amount of the individual supply guarantees, set out in Exhibit K-1, of those listed entities which are not parties to the Agreement. (If the City of Hayward ("Hayward") does not become a party to this Agreement, the Supply Assurance shall be reduced by 14.53 mgd as of July 1, 1984 and shall be further reduced at three year intervals thereafter (e.g., as of July 1, 1987, July 1, 1990, etc.) by the average amount of water delivered annually by the City to Hayward in excess of 14.53 mgd during the three year period. If the Estero Municipal Improvement District ("Estero") does not become a party to this Agreement, the Supply Assurance shall be reduced by 3.95 mgd as of July 1, 1984 and shall be further reduced at three year intervals thereafter by the average amount of water delivered annually by the City to Estero in excess of 3.95 mgd during the three year period.) Corresponding reductions shall also be made in the "ultimate base rates" and in the calculation of ultimate maximum day and ultimate maximum hour rates, as defined in Exhibit J.

The parties intend that the adjustments to the Supply Assurance provided for in this subsection be made in conjunction with the adjustments required by Section 7.02(b). At such time as annual adjustments are required by Section 7.02(b)(5), the reductions in the Supply Assurance provided for herein shall also be made annually rather than triennially.

Only those listed entities which are signatories to this Agreement and an Individual Contract shall be entitled to share in "residual water" as defined in Section 7.02.

(e) No provision of Article IX which applies to fewer than all of the suburban purchasers shall become effective unless the City and the suburban purchaser(s) to which the provision refers sign this Agreement and (except for Hayward and Estero) their Individual Contracts.

(f) The time limits in subsections (a), (b) and (c) of this Section may be extended by agreement of counsel for the City and Plaintiffs, for a period not to exceed sixty (60) days.

Section 2.02. *Disposition of the Action.*

At the time each of the Plaintiffs signs the Agreement and (except the City of Hayward) an Individual Contract, each Plaintiff also shall sign a Stipulation for Dismissal with Prejudice of the action ("the Stipulation") in the form attached hereto as Exhibit N. If all Plaintiffs sign the Stipulation, or if the City and those listed entities which have signed this Agreement and an Individual Contract exercise the option provided in Section 2.01(c)(2), then forty days after the last of the notices provided for in Section 8.18 has been filed, the City is authorized to and shall file the Stipulation on behalf of it and all Plaintiffs which have signed the Stipulation with the Clerk of the United States District Court for the Northern District of California.

The Stipulation shall recite that the prior injunctions entered in the action shall be vacated. Each party shall bear its own costs, including attorneys' fees, incident to its participation in the action.

In the event that a final judgment is entered by a court of competent jurisdiction declaring this Agreement to be invalid, the Stipulation shall not bar a listed entity from filing the same or a sim-

ilar action as the action which is dismissed by the Stipulation, except that a listed entity which joins in or supports a judicial challenge which results in the judgment declaring the Agreement to be invalid shall be barred from filing the same or a similar action as that dismissed by the Stipulation. By signing this Agreement, each party hereto explicitly and knowingly waives any and all rights to commence or maintain any action or proceeding to challenge its validity.

Each entity listed in subsection 1.01(b) which becomes a signatory to this Agreement hereby agrees that the Stipulation shall have the same force and effect as applied to it that the Stipulation has with respect to the Plaintiffs which sign it and that any claim the assertion of which would be barred by the Stipulation with respect to a Plaintiff signatory shall similarly be barred if asserted by a non-Plaintiff signatory of this Agreement.

Section 2.03. *Mutual Release of Past Monetary Claims.*

In the action, Plaintiffs asserted, *inter alia*, monetary claims against the City based on alleged historical overcharges for water sold by the City to suburban purchasers. The City in the action contended, *inter alia*, that it had historically undercharged suburban purchasers for water. The parties to this Agreement desire to release each other from any liability on account of such claimed monetary overcharges or undercharges, as follows:

(a) Each listed entity which is a signatory hereto releases City of and from any and all monetary claims for overcharges arising out of sales of water by City to such entity prior to June 30, 1984. This release shall not extend to any contested water billing between City and such entity, heretofore existing or hereafter arising, on grounds unrelated to the issues raised in the action, such as (without limitation) errors in billing, errors in the rate schedule applied, and disputes over the amount of water sold during a billing period; however, each such entity hereby warrants and represents to City that it knows of no such unrelated claims as of thirty days before the date of its signature hereto which have not been disclosed to the City. This release shall include all monetary claims for overcharges on water sold by the City prior to June 30, 1984, which were raised in the action or which could have been raised in the action, whether based on federal law (including the Raker Act), state law, the Charter of the City and County of San Francisco, or any other applicable provision of law.

(b) The City releases each listed entity which is a signatory hereto of and from any and all monetary claims for undercharges arising out of sales of water by the City to such entity prior to June 30, 1984. This release shall not extend to any contested water billing between the City and such entity, heretofore existing or hereafter arising, on grounds unrelated to the issues raised in the action, such as (without limitation) errors in billing, errors in the rate schedule applied, and disputes over the amount of water sold during a billing period; however, the City warrants and represents that it knows of no such unrelated claims against any such entity as of thirty days before the date of its signature hereto which have not been disclosed to the entity affected. This release shall include all monetary claims for undercharges on water sold prior to June 30, 1984, which were asserted by City or which could have been asserted by City in the action, whether by way of defense, counterclaim or otherwise, whether based on federal law (including the Raker Act), state law, the Charter of the City and County of San Francisco, or any other applicable provision of law.

(c) Each of the signatories to this Agreement hereby acknowledges that it is familiar with the provisions of and has been advised as to the meaning and effect of waiver of the rights and benefits conferred by California Civil Code Section 1542, and hereby knowingly waives the rights and benefits conferred by that section, which provides:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

Section 2.04. *Reservation of "Co-Grantee" Claims Under Raker Act.*

Plaintiffs contended in the action that they and the other suburban purchasers which are municipalities or water districts are "co-grantees" within the meaning of Section 8 of the Act, and are entitled to certain rights, benefits and privileges by virtue of that status. The City has denied those claims. Nothing in this Agreement (or in the Individual Contracts which shall subsequently be entered into between the parties incorporating this Agreement) shall be construed or interpreted in any way to affect or influence the ultimate resolution of the controversy between the parties concerning whether any of the suburban purchasers are "co-grantees" under the Raker Act and, if so, what rights, benefits and privileges accrue to them by reason of that claimed status, nor shall the dismissal with prejudice filed pursuant to Section 2.02 bar the future adjudication of such claims. Notwithstanding anything in this Section, this Agreement shall determine the respective monetary rights and liabilities of the parties with respect to the water sold by the City to the suburban purchasers during the Term hereof, and such rights and liabilities shall not be affected by any judgments or orders issued by any court in any other litigation, whether or not between the parties hereto, and whether or not related to the controversy over co-grantee status, except for arbitration and/or litigation reserved by Section 8.01 or initiated pursuant to Section 8.02. The reservation of Raker Act rights in this Section is subject to the waiver of those rights in Sections 5.05(b) and 8.01(b) and (c).

Section 2.05. *Dismissal of Claim re Intra-City Fund Transfers.*

Plaintiffs contended in the action that a certain proposed transfer of funds from the San Francisco Water Department (SFWD) to the City's General Fund violated provisions of state and federal law (including the Act) as well as then-existing contracts between Plaintiffs and the City. The suburban purchasers hereby acknowledge that the filing of the Stipulation described in Section 2.02 shall dismiss with prejudice all those claims asserted in the action with respect to transfers of funds and that unless such Stipulation ceases to be a bar to the filing of the same or a subsequent action pursuant to the penultimate paragraph of Section 2.02, these claims shall be forever barred as to them. Each suburban purchaser hereby unconditionally waives and releases the City from any and all claims heretofore or hereafter arising from transfers by the City, not prohibited by its Charter, of funds from the SFWD to any other department or fund of the City, during the Term of this Agreement, and further agrees unconditionally not to contest the validity of any such transfer before any court or administrative official, tribunal or agency. However, this waiver and release shall not absolve the City from the performance of any duty or obligation imposed under this Agreement, and it shall be no defense to any proceeding, whether judicial or arbitral, brought to enforce the terms of this Agreement or for the breach thereof, that performance by the City has been rendered impossible or impracticable because of any transfers of funds from the SFWD to any other department or fund of the City. Nothing in this Section is intended or shall be construed to infringe the City's right under Section 5.03(b)(1) to raise rates on an emergency basis to cover capital expenses if the SFWD does not have sufficient unappropriated funds available for use and is unable to obtain sufficient funds, in the time necessary, through the issuance of bonds or from state or federal grants.

ARTICLE III

TERM

Section 3.01. *Term.*

The term ("Term") of this Agreement shall be twenty-five (25) years. The Term shall begin on July I, 1984, regardless of whether the effective date is before or after that date, and shall end on June 30, 2009, provided that the City shall have no obligation to comply with the provisions of Section 5.02 and 5.03 prior to the effective date of the Agreement. Except as provided in Article IX, the Term of all Individual Contracts shall also begin on July 1, 1984 and end on June 30, 2009.

Section 3.02. *Extension of Term.*

After the expiration of the Term, this Agreement may be extended by mutual consent of the parties, subject to any modifications thereof which may be determined at that time. If fewer than all of the parties signatory hereto desire to extend this Agreement beyond its Term, with or without modifications, the City and those of the suburban purchasers who wish to extend the Agreement shall be free to do so, provided that no party to this Agreement which does not wish to become a party to such an extended Agreement shall be compelled to do so by the actions of any other party to this Agreement under this Section.

Section 3.03. *Modifications During Term.*

(a) At any time during the Term of this Agreement, or any extension thereof, the parties agree, if requested by any signatory hereto, to conduct mutual negotiations in good faith on the subject of any modifications hereof which may be desired by any signatory hereto and, pursuant to such negotiations, this Agreement may be amended by mutual consent of all parties.

(b) This Agreement may also be amended with the consent of the City and of suburban purchasers representing at least 95 percent of the quantity of water delivered by the City to all suburban purchasers during the preceding fiscal year, provided that no amendment substantially and adversely affecting a fundamental right of a suburban purchaser under this Agreement may be made without the consent of that purchaser. Fundamental rights of suburban purchasers include, but are not limited to, their status as parties to this Agreement, their allocation of water as provided in Sections 7.02 and 7.03, and any specific rights conferred in Article IX. No amendment to Article IV or Section 5.04 which has the effect of discriminating against any individual suburban purchaser or any group of fewer than all of the suburban purchasers shall become effective without the consent of the suburban purchaser(s) thereby adversely affected. Amendments to Article IV which merely affect the allocation of expenses between direct City water users, on the one hand, and the suburban purchasers collectively, on the other, and amendments to Sections 5.02, 5.03, 5.06 and 5.07(a) through (d) and Article VI which merely alter the budgetary, rate-making, balancing account, accounting and auditing procedures described therein, shall become effective if approved by the City and suburban purchasers representing at least 95 percent of the quantity of water delivered by the City to all suburban purchasers during the preceding fiscal year.

(c) When an amendment has been approved by the City and 95 percent of the suburban purchasers (as herein defined) pursuant to subsection (b), the City shall give notice of the amendment's adoption to the suburban purchasers. Notwithstanding any other provision of law or this Agreement, any suburban purchaser which claims that an amendment to this Agreement that has been approved pursuant to subsection (b) violates its rights under that subsection shall have thirty days from the date the City sends the notice of the amendment's adoption in which to challenge the amendment's validity through appropriate judicial action. If no such action is filed within said thirty day period, the amendment shall be finally and conclusively deemed to have been adopted in compliance with this Article.

(d) If this Agreement becomes effective pursuant to either Sections 2.01(a) or 2.01(b), then it may be amended to admit additional listed entities as parties, until August 7, 1984, with the consent of the City and suburban purchasers representing 66.7 percent of the 1981 water usage of those listed entities that have already become parties. After August 7, 1984, the admission of new listed entities as parties shall require 95 percent approval and the admission of new parties who are not listed entities shall require the consent of the City and all suburban purchasers.

(e) Notwithstanding the provisions of subsections (a) and (b), any provision of Article 1X which applies only to an individual suburban purchaser may be amended with the concurrence of the City and the suburban purchaser to which it applies; provided that the amendment will not, directly or indirectly, adversely affect either the quantity of water available to other suburban purchasers or the cost of that water to other suburban purchasers. (An example of provisions in Article IX whose amendment is not permissible under this subsection is the maximum water delivery levels and service areas for San Jose and Santa Clara provided for in Section 9.03.)

Before making any such amendment effective, the City shall give notice, with a copy of the text of the proposed amendment, to all other suburban purchasers. The suburban purchasers shall have sixty (60) days in which to object to the amendment on the ground that it is not permissible under this subsection. If no such objection is received by the City, the proposed amendment may become effective. If one or more suburban purchasers object to the amendment, the City, the individual suburban purchaser with which the City intends to effect the amendment, and the suburban purchaser(s) which lodged the objection shall meet to discuss the matter.

If the dispute cannot be resolved and the City and the suburban purchaser involved elect to proceed with the amendment, either the City or the suburban purchaser shall give written notice of such election to each suburban purchaser which has objected. Any suburban purchaser which has objected to such amendment shall have sixty (60) days from receipt of this notice within which to commence an action challenging the validity of such amendment, and such amendment shall be deemed effective as of the end of this 60-day period unless restrained by order of court.

(f) Notwithstanding the foregoing provisions of this Section, the City may amend Exhibit J with the consent of the Suburban Representatives to reflect changes in the inputs into the SFWD wholesale system, changes in service connections, additions or retirement of assets, or any other change that would affect the calculation of the usage rates and ratios described in Exhibit J. The Suburban Representatives shall not unreasonably withhold consent to amendments proposed by the City. If the Suburban Representatives do not consent to an amendment proposed by the City, the City may implement the amendment and perform the calculations described in Exhibit J in accordance with the terms of the amendment, unless and until an arbitrator orders otherwise.

(g) Notwithstanding the foregoing provisions of this Section, the City may amend Exhibit E as provided therein, subject to the provisions concerning notice and arbitration contained therein.

Section 3.04. *Deferral of Agreement's Term.*

The Term of the Agreement referred to in Section 3.01 was originally contemplated to commence on July I, 1983, and it now has been agreed that the Term will commence on July I, 1984. Because of the deferral of the commencement date of the Term, the Ciy hereby agrees that: (1) there shall be no rate increases for fiscal year 1984/85 applicable to suburban purchasers, provided that this provision shall not preclude an emergency rate increase if permitted under Section 5.03(b); (2) it will not, because of the execution of this Agreement, defer to fiscal year 1984/85 the incurring or accrual of any item of operating, maintenance, or administrative and general expense which otherwise would have been incurred or accrued during fiscal year 1983/84; and (3) it will not, because of the execution of this Agreement, delay beyond June 30, 1984, the completion or placement into service of revenue-funded assets under construction in fiscal year 1983/84 which otherwise would have been completed or placed into service during said fiscal year.

ARTICLE IV

SUBURBAN REVENUE REQUIREMENT

Section 4.01. *Scope of Article.*

This Article shall be applicable only to the rates charged by the City to the suburban purchasers for water delivered pursuant hereto. Nothing contained in this Agreement (with the exception of Section 8.07) shall be interpreted or construed so as to limit, constrain or in any way affect the rates which San Francisco may charge for water sold to water users within the City's geographical boundaries, water sold to City departments or agencies located outside of the City's geographical limits, water sold to the City's other water purchasers located outside of the City's geographical limits (including those listed entities which do not execute this Agreement) or the methodology by which any or all of such rates are determined. These three categories of water users are referred to herein as "direct City water users." Suburban purchasers, as defined in Article I, and direct City water users, as defined in this Section, represent all existing users of water supplied by the San Francisco Water Department.

Section 4.02. *General Principles of Cost Allocation.*

The purpose of this Article is to set forth the method by which the suburban purchasers' collective share of the San Francisco Water Department's (SFWD's) total revenue requirements will be determined. This collective share shall be termed the "suburban revenue requirement." The suburban revenue requirement will consist of the sum of the suburban purchasers' allocated shares of the operating and capital costs, determined on the utility basis as hereinafter set forth, incurred by the SFWD in providing water to the suburban purchasers. Specifically, the suburban revenue requirement will consist of and be limited to the following six categories:

- operating and maintenance expenses
- administrative and general expenses
- property taxes
- return on rate base
- depreciation on utility plant
- the Suburban Hetch Hetchy Assessment

In each of these categories, costs related only to providing water to direct City water users ("direct City costs") will be allocated entirely to such users. Costs related only to providing water to suburban purchasers ("direct suburban costs") will be allocated entirely to such users. Costs related to providing water to both direct City water users and to suburban purchasers ("joint costs") will be allocated between the City and the suburban purchasers in accordance with the following methodology. "Wholesale" costs shall include both joint costs and direct suburban costs.

Section 4.03. *Operating and Maintenance Expenses.*

There are five categories of Operating and Maintenance expenses:

(a) *Source of Supply.*

Description: This category includes operating and maintenance expenses attributable to collecting and impounding reservoirs, lakes, tunnels, wells, and supply mains operated by the SFWD. Outside-City joint expenses in this category are presently assigned to the SFWD accounts listed in Exhibit A-1.

Allocation: Source of supply expenses attributable to operation and maintenance of components of the system benefitting only direct City water users, which are identified as in-City expenses in the SFWD cost ledgers (i.e., expenses posted to accounts beginning with "4" or "64"), will be allocated

to the City. Source of supply expenses attributable to operation and maintenance of components of the system benefitting both direct City water users and suburban purchasers, which are identified in the City's cost ledgers as outside-City expenses (i.e., expenses posted to accounts beginning with "5" or "65"), will be jointly allocated between the City and the suburban purchasers on the basis of annual proportional usage of water, i.e., at the "current base rates" as defined in Exhibit J.

(b) *Pumping.*

Description: This category includes labor, fuel and power purchased for pumping water, and the operation and maintenance of pumping equipment. Outside-City joint pumping expenses are presently assigned to the SFWD accounts listed in Exhibit A-2. (In determining pumping charges the City shall be entitled to have the Hetch Hetchy Water and Power Department (HHWPD) bill SFWD for power supplied to SFWD by HHWPD at rates which shall not exceed the rates which would be charged by the Pacific Gas & Electric Company for providing like classes of electric service under its then-current rate schedules.)

Allocation: Pumping expenses shall be allocated on the basis of the City's cost ledger location codes (in the same manner as source of supply expenses) with in-City expenses allocated entirely to the City and outside-City expenses allocated jointly between the City and the suburban purchasers. Outside-City joint pumping expenses shall be allocated at the current base rates.

(c) *Purification.*

Description: This category includes labor, purchase of supplies, and the operation and maintenance of facilities used for water treatment. Outside-City joint purification expenses are presently assigned to the SFWD accounts listed in Exhibit A-3.

Allocation: Purification expenses will be allocated on the basis of the City's cost ledger location codes (in the same manner as source of supply expenses), with in-City expenses allocated entirely to the City and outside-City expenses allocated jointly between the City and the suburban purchasers. Outside-City joint purification expenses shall be allocated at the current base rates.

(d) *Transmission and Distribution Expenses.*

Description: The wholesale portion of this category includes operating and maintenance expenses attributable to the storage and distribution reservoirs and appurtenant mains, suburban meters and services, and certain related miscellaneous expenses. Direct suburban and joint transmission and distribution expenses are presently assigned to the SFWD accounts listed in Exhibit A-4.

Allocation: Transmission and distribution expenses shall first be divided between in-City expenses and outside-City expenses on the basis of the City's cost ledger location codes (in the same manner as source of supply expenses), with in-City expenses allocated entirely to the City and outside-City expenses allocated jointly between the City and the suburban purchasers. This general rule is subject to two exceptions.

First, the transmission and distribution expenses related to Sunset Reservoir (Account No. 467760), University Mound Reservoir (Account No. 468760), and Merced Manor Reservoir (Account No. 469760) shall be allocated as outside-City joint expenses, despite their in-City categorization in the SFWD cost ledger location codes.

Second, the following outside-City expenses related to the Palo Alto Pipeline shall be allocated entirely to the suburban purchasers without further allocation:

539753 Transmission & Distribution Lines Expense

539761 Maintenance of Transmissions & Canals

After these modifications have been made, outside-City joint transmission and distribution expenses shall be allocated between the City and the suburban purchasers at the current base rates.

(e) *Customer Accounts.*

Description: This category includes meter reading, customer record keeping and collection costs. It presently consists of the line items in the SFWD cost ledgers listed in Exhibit A-5.

Allocation: Customer accounts expenses will be allocated 98% to the City and 2% to the suburban purchasers.

Section 4.04. *Administrative and General Expenses.*

Description: This category consists of expenses associated with the administration of the SFWD and other general expenses, including City overhead and the San Francisco Public Utilites Commission charges. While the majority of these expenses are identified as in-City expenses in the City's cost ledger location codes, most in fact benefit both wholesale and in-City water users. Accordingly, they are not allocated on the basis of location code identification.

There are three subcategories of Administrative and General Expenses, which are to be calculated and allocated as follows.

(a) *City Overhead.*

This subcategory consists of support services provided by the City's central service departments which have not been directly billed to SFWD or other operating departments. All operating departments of the City are assigned a prorated share of these unbilled costs, although only those City departments which are not supported by ad valorem taxes actually reimburse the City's general fund for their share. The SFWD's share of these costs is presently identified in the SFWD cost ledgers as Account No. 649000-0920.

The parties have agreed in principle that the bases on which these costs are allocated to the SFPUC, the SFWD and the HHWPD should fairly reflect the proportional benefit which each receives (along with other City departments and agencies) from the central service department whose costs are being allocated. The parties have also agreed that costs of central service departments allocated by the City in accordance with a "Countywide Cost Allocation Plan" ("COWCAP") prepared annually by the City and submitted to and approved by the Bureau of Cost Plans in the State Controller's office (or its successor) should be entitled to a rebuttable presumption that they have been fairly allocated for purposes of this Agreement. However, the parties have not been able to agree on specific limits or allocational bases for costs of central service departments not reimbursable by the federal government and hence not included in the annual COWCAP. Accordingly, for purposes of this Agreement, City overhead allocable to direct City water users and suburban purchasers shall be determined in the following manner.

For FY 1984/85, the City overhead charge shall be deemed to equal $600,000 for the SFWD and $240,000 for the SFPUC. For the next four succeeding fiscal years (e.g., FY 1985/86 through 1988/89), the City overhead charge shall be deemed to equal the deemed City overhead charge for FY 1984/85, adjusted to reflect changes in the San Francisco-Oakland Metropolitan Area Consumer Price Index (All Urban Consumers, 1967=100). (This index level is 307.3 as of December 1983.) The index level as of June 1984 shall be the Base Index. The deemed City overhead charge for (e.g., FY 1985/86) shall be adjusted based on the percentage change from the Base Index to the index as of June 1985. The deemed City overhead charge as so computed shall be in lieu of all other City overhead charges whether or not included in the annual COWCAP. In addition, the deemed City overhead charge will be reduced if costs of central service departments included in the COWCAP prepared for FY 1983/84 and certified by the City's Controller on February 18, 1983 are thereafter billed directly to the operating departments rather than allocated, via COWCAP or otherwise, and increased if costs of central service departments directly billed to the operating departments as of FY 1983/84 are thereafter allocated to the SFWD, via COWCAP or otherwise, rather than billed directly.

Before the close of fiscal year 1988/89, the City and the Suburban Representatives shall meet to discuss how City overhead shall be allocated to the suburban purchasers in fiscal years after FY 1988/89. As the result of these negotiations, the City and the Suburban Representatives may agree either on a methodology for actually allocating City overhead to the SFWD, the SFPUC and the HHWPD or, in the alternative, on a procedure for determining a "deemed City overhead charge" (such as that described in the preceding paragraph for FY 1984/85 through 1988/89) to be annually substituted for purposes of this Agreement for the actual City overhead annually charged to the SFWD, the SFPUC and the HHWPD.

If the City and the Suburban Representatives are unable to reach either of the agreements specified in the preceding paragraph after negotiations, the City or any of the suburban purchasers may invoke arbitration pursuant to Section 8.02. The arbitrator shall have no power to direct the City's actual allocation of City overhead to the SFWD, the SFPUC, or the HHWPD, but shall have power to specify a "deemed City overhead charge" (or procedure for determining such charge) which fairly allocates the costs of central service departments in accordance with the principle set forth above. The "deemed City overhead charge" specified by the arbitrator or determined through the procedure specified by the arbitrator shall then be annually substituted for the actual City overhead annually charged to the SFWD, the SFPUC and the HHWPD. No "deemed City overhead charge" nor procedure specified by an arbitrator for determining the annual "deemed City overhead charge" shall last longer than five fiscal years. During the last year of that period, the City and the Suburban Representatives shall again attempt to negotiate an agreement in accordance with the preceding paragraphs. If these negotiations are unsuccessful, the matter will be referred to arbitration again for the determination of another "deemed City overhead charge" or procedure for determining such charge to be used during the next succeeding five-year period.

(b) *San Francisco Public Utilities Commission Charges.*

This subcategory consists of support services provided by the San Francisco Public Utilities Commission (SFPUC) and its constituent bureaus to the SFWD and the other operating departments under the jurisdiction of the SFPUC. It is presently identified in the SFWD cost ledgers as Accounts No. 649014 and 649000-3600.

The bases by which these costs are allocated among the operating departments shall fairly reflect the proportional benefit which each department receives from the SFPUC support services and bureaus whose costs are being allocated.

In order to implement the foregoing principle, the City will allocate those costs of SFPUC support services and bureaus which are reimbursable by the federal government under federal grant guidelines (hereafter called "federally allowable PUC costs") in accordance with the allocational bases included in the annual "PUC Indirect Cost Allocation Plan" for the fiscal year in question prepared by the City and submitted to the Division of Cost Allocation of the United States Department of Health and Human Services, or its successor, provided that the costs of leasing SFWD revenue-producing properties, now accounted for in the Real Estate Department within the Bureau of Administration, shall not be allocated to the suburban purchasers.

Costs of SFPUC support services and bureaus allocated in accordance with the allocational bases prescribed for them in a "PUC Indirect Cost Allocation Plan" submitted by the City to the Division of Cost Allocation of the United States Department of Health and Human Services and approved by said Division (or its successor) shall (with the exception of the leasing costs noted above) be entitled to a rebuttable presumption that they have been fairly allocated for purposes of this Agreement.

Costs of SFPUC support services and bureaus which are not reimbursable by the federal government under federal grant guidelines (i.e., which are not federally allowable PUC costs) may

nevertheless be allocated to the suburban purchasers. Such costs shall be allocated to the SFWD on the bases set out in Exhibit A-6.

The allocational bases set out in Exhibit A-6 may be changed by the City to correspond with changes in the allocational bases for federally allowable SFPUC costs which are approved or required by the federal government (or its delegate), to reflect changes in organization within the SFPUC or its departments, or changes in the functions performed by the departments whose costs are being allocated, or to increase the accuracy and/or equity of the SFPUC cost allocation process. Any changed allocational bases must similarly comply with the principle stated above.

The City overhead costs allocated to the SFPUC under the Countywide Cost Allocation Plan (COWCAP) described in paragraph (a) above, or other allocational procedure, shall not be charged to the suburban purchasers since those costs are to be replaced by the "deemed City overhead charge" determined under that paragraph. The deemed City overhead charge so determined shall, however, be allocated among MUNI, SFWD and HHWPD in the same proportion that the COWCAP costs allocated to the SFPUC are reallocated to the operating departments by the PUC Indirect Cost Allocation Plan for each fiscal year. This allocation of the deemed City overhead charge shall be entitled to the same rebuttable presumption described above for other costs so allocated.

(c) *Other.*

The remaining administrative and general expenses which are partially allocable to the suburban purchasers presently consist of the line items in the SFWD cost ledgers listed on Exhibit A-7; provided that the maximum amount which may be allocated in any year to the suburban purchasers as the result of payments by the City for claims arising out of breaks occurring in water transmission lines and mains and in-City reservoirs which are not included in the SFWD wholesale utility plant shall be $100,000. Claims expenses covered by this annual aggregate limitation are presently identified in the SFWD cost ledgers as Account No. 649031. The $100,000 limitation shall be automatically adjusted every year in accordance with changes in the Consumer Price Index for the San Francisco-Oakland Metropolitan Area, provided that in no event will it be reduced below $100,000.

Allocation: Except as provided in the following paragraph, City overhead, SFPUC charges, and other administrative and general expenses shall be allocated between the City and the suburban purchasers on the basis of the composite of the allocated expenses in the five Operating and Maintenance categories. The suburban share of these expenses shall be equal to the total of such expenses (determined as set out above) times the following fraction:

$$\frac{\text{Suburban share of SFWD source of supply, pumping, transmission and distribution, purification, and customer accounts expenses}}{\text{Total SFWD source of supply, pumping, transmission and distribution, purification, and customer accounts expenses}}$$

Administrative and general costs incurred by the SFPUC and SFWD in connection with the implementation and administration of this Agreement (which are presently assigned to Account No. 649024) shall be allocated equally between the City and the suburban purchasers. The intent of this paragraph is that the expense of new operations and procedures incurred as a result of the City's obligations under this Agreement (including but not limited to preparation of the estimated suburban revenue requirement under Section 5.03 and the interim and final suburban revenue requirements under Section 6.02) will be allocated equally to the City and the suburban purchasers but that expenses associated with administrative operations and procedures which existed prior to the effective date of this Agreement or which are not incurred as a result of the City's obligations under this Agreement will be allocated as provided above and will not be transferred to this account.

Expenses in this account in excess of $200,000 in any fiscal year shall be allocated pursuant to the formula in the preceding paragraph. Costs of the compliance audit allocated to the City under Section 6.03(b) and costs allocated to the City under Section 6.06 regarding the Suburban Review shall not be chargeable against this $200,000 limit. This $200,000 limit shall be automatically adjusted every year in accordance with changes in the Consumer Price Index for the San Francisco-Oakland Metropolitan Area, provided that in no event will it be reduced below $200,000.

Section 4.05. *Property Taxes.*

Description: This category consists of ad valorem property taxes levied against SFWD properties located in San Mateo, Santa Clara and Alameda Counties. It presently consists of the costs recorded in Account No. 659019 in the SFWD cost ledgers.

Allocation: All property tax expenses will be allocated between the City and the suburban purchasers at current base rates; provided, however, that the total property taxes allocable will first be reduced by the amount of said taxes which are passed through to tenants or users of SFWD property and reimbursed to the City by such tenants or users.

Section 4.06. *Return on SFWD Rate Base.*

(a) *Description:* Return on the SFWD rate base consists of the SFWD's return on that portion of its wholesale net utility plant and wholesale working capital allowance allocable to the suburban purchasers. The return on the SFWD rate base is the product of (1) the portion of the total SFWD rate base allocable to the suburban purchasers times (2) the overall rate of return. Each component shall be calculated as set forth below.

(b) *Calculation of Rate Base.*

The portion of the total SFWD rate base on which a return is to be paid is the suburban purchasers' share of the wholesale rate base. The wholesale portion of the total SFWD rate base must first be determined. Thereafter, the wholesale rate base must be allocated between the City and the suburban purchasers.

(i) *SFWD Wholesale Rate Base.*

The wholesale portion of the total SFWD rate base shall be the sum of (1) the average of the wholesale portion of SFWD net utility plant in service at the beginning of the year and the wholesale portion of SFWD net utility plant in service at the end of the year (i.e., the beginning wholesale net utility plant plus capital additions less depreciation, retirements and other dispositions removing an asset from utility plant in service) and (2) a wholesale working capital allowance (calculated as shown in Exhibit B-3) equal to one-sixth (⅙) of the annual wholesale SFWD operating and maintenance expenses and wholesale SFWD administrative and general expenses. As used in the previous sentence, "wholesale SFWD administrative and general expenses" shall be equal to the product of total SFWD administrative and general expenses times the following fraction:

$$\frac{\text{Wholesale SFWD source of supply, pumping, purification, transmission and distribution, and customer-accounts expenses}}{\text{Total SFWD source of supply, pumping, purification, transmission and distribution, and customer-accounts expenses}}$$

(For purposes of computing this ratio, wholesale customer accounts expense shall be deemed to be two (2) percent of total customer accounts expense.)

The wholesale portion of the SFWD net utility plant in service shall be the sum of the net book values, determined on the basis of depreciated original cost, of (1) all bond-funded SFWD

assets or portions thereof except those used to serve only direct City water users, as defined above, included in net utility plant as of June 30, 1984; and (2) all assets or portions thereof, however funded, added to net utility plant in service after June 30, 1984 except: (a) assets used to serve only direct City water users; and (b) assets, or portions thereof, funded from federal or state grants or direct user contributions. Thus, assets added to utility plant during fiscal year 1983/84 and funded from revenue shall not be included in the wholesale rate base for purposes of this Agreement. (A list of the revenue-funded assets which the City expects to add to the SFWD utility plant during fiscal year 1983/84 is shown in Exhibit B-4; these assets will not be included in the SFWD wholesale rate base for purposes of this Agreement regardless of whether they are actually placed into service during FY 1983/84 or thereafter.)

If the City finances the acquisition of new assets for the SFWD by means other than from revenues or through bonded debt (e.g., by means of leases), the capitalization of those assets, the treatment of related expenses and related debt, and all other aspects of their accounting treatment, for purposes of this Agreement, shall be in accordance with Generally Accepted Accounting Principles, as amended from time to time.

The net book value of all debt-funded assets included in net utility plant in service as of June 30, 1983 and their categorization as direct City, direct suburban or joint (which includes the eight subcategories of joint equipment assets described below) is shown in Exhibit B. The City will furnish the Suburban Representatives a list of all debt funded assets, together with the asset number, category, net book value, service life and annual depreciation for each, added to the SFWD utility plant during FY 1983/84. This list shall be delivered on or before December 31, 1984.

Interest on new debt-funded assets shall be capitalized in accordance with applicable Generally Accepted Accounting Principles, as amended from time to time.

(ii) *Suburban Share of SFWD Wholesale Rate Base.*

The suburban purchasers' share of the SFWD wholesale rate base shall consist of (1) a share of the wholesale working capital allowance defined above and (2) a share of the SFWD wholesale net utility plant in service.

The suburban purchasers' share of the wholesale working capital allowance is equal to one-sixth (1/6) of their share of wholesale SFWD operating and maintenance and administrative and general expenses, as determined pursuant to Sections 4.03 and 4.04 and as illustrated in Exhibit B-3.

The suburban purchasers' share of the SFWD wholesale net utility plant in service shall be the sum of the suburban share of each asset included therein. Each asset in the SFWD wholesale net utility plant shall be assigned to a category, based upon its characterization, and each category will be allocated between the City and suburban purchasers based on their respective use of assets within that category. The categories into which the assets in the SFWD wholesale net utility plant are segregated are as follows:

Land

Direct suburban

Joint

Equipment

Direct suburban

Joint

Joint equipment assets are further subdivided ino the following subcategories:

Current base
Ultimate base
Current maximum day
Ultimate maximum day
Current maximum hour
Ultimate maximum hour
Standby
Composite

The definitions of each of these categories and subcategories and the allocational basis or formula by which each is to be allocated between the City and the suburban purchasers are contained in Exhibit C. The categorization of each asset included in the SFWD net utility plant in service as of June 30, 1983 is listed in Exhibits B-1 and B-2. The categorization of assets (and thus their subsequent allocation) added to the SFWD net utility plant in service after June 30, 1983 shall be as agreed upon by the parties and, in the event they are unable to agree, by arbitration as provided in Section 8.02. Debt funded assets scheduled to be added during FY 1983/84 shall be categorized as shown in Exhibit B-5.

(c) *Calculation of Overall Rate of Return.*

The overall rate of return on the SFWD wholesale rate base is equal to the sum of (1) the product of the cost of SFWD wholesale debt times the SFWD wholesale debt percentage and (2) the product of the return on SFWD wholesale equity times the SFWD wholesale equity percentage.

Each of these terms shall be defined and/or derived as follows:

(i) The cost of SFWD wholesale debt is the wholesale debt interest expense for the year divided by the average outstanding balance of SFWD wholesale debt. At any given date, SFWD wholesale debt outstanding is that portion of total SFWD debt outstanding the proceeds of which have been used to finance the construction or acquisition of assets included in the SFWD wholesale utility plant in service as of that date. The average outstanding balance of SFWD wholesale debt is the beginning of the year balance plus the end of the year balance, divided by 2. The cost of SFWD wholesale debt for FY 1983/84 is estimated to be 5.1355%, as shown in Exhibit D-1.

(ii) The SFWD wholesale debt percentage is the percentage obtained by dividing the average outstanding balance of SFWD wholesale debt by the sum of (a) the average SFWD wholesale net utility plant in service plus (b) the wholesale working capital allowance defined in Section 4.06(b)(i).

The SFWD wholesale debt percentage for FY 1983/84 is estimated to be 26.16%. In subsequent years, SFWD wholesale debt shall include all outstanding City debt, the proceeds of which are used to construct or acquire SFWD wholesale assets. The wholesale portion of any debt issued in the future, some or all of which is used to construct or acquire SFWD assets, will be equal to a fraction, the numerator of which shall be the original cost of wholesale utility plant assets financed by the proceeds of such debt, and the denominator of which shall be the total proceeds of such debt.

The wholesale share of currently outstanding debt shall be as shown in Exhibit D-1.

(iii) The return on SFWD wholesale equity shall be calculated by determining the arithmetic average of the rates of return authorized by the California Public Utilities Commission (CPUC) on common equity for Class A water utilities during the last full calendar year immediately preceding the fiscal year for which the SFWD rate is to be developed. All water utilities presently

classified as Class A by the CPUC are listed on Exhibit E. In determining the average rate of return authorized by the CPUC, decisions authorizing the same rate of return on common equity to different districts or divisions of the same utility will be counted as one decision. The CPUC average rate of return shall then be multiplied by 85% to determine the rate of return on SFWD wholesale equity.

(iv) The SFWD wholesale equity percentage is equal to 100% minus the SFWD wholesale debt percentage.

The methodology for calculating the overall rate of return on SFWD wholesale rate base is shown on Exhibit F-1.

Section 4.07. *SFWD Depreciation.*

SFWD depreciation is the annual depreciation expense on the original cost of assets in the wholesale portion of SFWD utility plant in service. The "original cost" of each asset used for calculating depreciation for purposes of this Agreement shall be equal to the original cost of the asset minus any revenue-funded portions thereof (including capitalized interest funded from revenue) added to the rate base prior to June 30, 1984 and any portion of the asset financed from federal or state grants or direct user contributions.

The original cost, salvage value, service lives and annual depreciation expense of all debt-funded assets included in the wholesale portion of SFWD utility plant in service as of June 30, 1983 shall be as shown in Exhibit B-1. (No depreciation expense will continue for any asset once that asset has no remaining service life; however, such assets will continue to be included in the rate base at their salvage value, if any.) Assets added to the wholesale portion of SFWD utility plant after June 30, 1983 shall be assigned reasonable service lives and salvage values consistent with waterworks industry standards and practices. Debt-funded assets scheduled to be added during FY 1983/84 shall be assigned service lives as shown in Exhibit B-5.

Depreciation shall be calculated on a straight line basis.

The suburban purchasers' share of depreciation on each asset in the SFWD wholesale utility plant shall be equal to the total annual depreciation on each such asset times the suburban share of such asset (i.e., the percentage of each asset which has been allocated to the suburban purchasers for return on rate base purposes, as provided above). The total annual SFWD depreciation charge shall be equal to the sum of the suburban depreciation of each asset in the SFWD wholesale utility plant.

Section 4.08. *Suburban Hetch Hetchy Assessment.*

Description:

The Suburban Hetch Hetchy Assessment ("Assessment") is the charge assessed by the City to the suburban purchasers for the delivery of water by the Hetch Hetchy Water and Power Department ("HHWPD") from the Sierra watersheds to the SFWD's Alameda East Portal in Alameda County.

The Assessment consists of the suburban purchasers' share of

- the water-related portion of HHWPD operating expenses;
- the water-related portion of HHWPD maintenance expenses;
- the water-related portion of HHWPD property taxes;
- return on the water-related HHWPD rate base;
- depreciation on the water-related HHWPD utility plant.

Calculation:

Calculation of the Assessment entails two steps.

First, the water-related share of HHWPD operating and maintenance expenses and property taxes, the return on water-related rate base and depreciation on water-related utility plant must be determined.

Second, the suburban purchasers' share of these items must be determined.

(a) *Calculation of Water-Related Portion of HHWPD Expenses, Property Taxes, Return and Depreciation.*

(1) *Operating Expenses.*

Description: This category consists of expenses incurred in operating physical facilities within the HHWPD jurisdiction and related administrative and general expenses. Expenses associated exclusively with the production and distribution of hydroelectric power (e.g., purchased power, wheeling charges, rental of power lines and operation of SF Municipal Railway (MUNI) overhead lines) are categorized as power-specific and are not allocated to water. In addition, expenses associated with operating power facilities such as generating plants and transmission lines are also categorized as power-specific and are not allocated to water. Expenses associated with the operation of facilities which serve both the water and power functions (such as dams) are categorized as "joint" and are allocated to each function as described below. Expenses associated exclusively with the operation of facilities which serve only the water function (such as water transmission pipelines) are categorized as water-specific and are allocated entirely to water.

Allocation: Water-specific operating expenses presently consist of the line items in the HHWPD cost ledgers so designated on Exhibit G-1. These expenses shall be allocated entirely to water.

Power-specific operating expenses presently consist of the line items in the HHWPD cost ledgers so designated on Exhibit G-1. These expenses shall be allocated entirely to power.

Joint operating expenses presently consist of the line items in the HHWPD cost ledgers so designated on Exhibit G-1. These expenses shall be allocated 55% to power and 45% to water, except for City overhead and SFPUC charges, which shall be allocated as follows:

(A) *City Overhead.*

Description: This category consists of support services provided by the City's central service departments which have not been directly billed to HHWPD or other operating departments, as described in Section 4.04(a). The HHWPD's share of these costs is presently identified in the HHWPD cost ledgers as account No. 840920-0920.

Allocation: For purposes of this Agreement, the City overhead allocable to the HHWPD shall be "deemed" in the same manner and be subject to the same restrictions as City overhead is "deemed" to the SFWD and the SFPUC pursuant to Section 4.04(a). For FY 1984/85, the City overhead allocable to the HHWPD shall be deemed to equal $250,000. Thereafter, the HHWPD share of City overhead shall increase or decrease to reflect changes in the San Francisco-Oakland Metropolitan Area Consumer Price Index through FY 1988/89. After FY 1988/89, the HHWPD share of City overhead shall be determined through the negotiation/arbitration process set forth in Section 4.04(a).

City overhead costs allocated to the HHWPD in accordance with Section 4.04(a) and (b) and the preceding paragraph shall in turn be reallocated to water on the basis of a percentage derived from a fraction, the numerator of which is the sum of all HHWPD water-related operating and maintenance expenses as defined herein for the fiscal year in question, including 45% of joint operating and maintenance expenses but excluding City overhead and SFPUC charges, and the denominator of which is the total HHWPD operating and maintenance expenses, including all water-specific, joint and power-specific expenses, but excluding purchased power charges, wheeling charges,

rental of power lines, City overhead and SFPUC charges. The formula for allocation of City overhead costs is shown in Exhibit G-2.

(B) *Public Utilities Commission Charges.*

Description: This category consists of support services provided by the San Francisco Public Utilities Commission and its constituent bureaus to the HHWPD and the other operating departments under the jurisdiction of the SFPUC. For purposes of this Agreement, the expenses of such services shall be divided into two categories, "Class A" and "Class B." Class A services are those the costs of which are either assigned among departments based on a direct identification of use or on the basis of an allocation statistic other than the department's total expenditures, including all operating and capital expenditures. Examples of costs in this category presently include safety, training and claims processing expenses of the Bureau of Administration and the computer support from the Bureau of Management Information Systems. Class B services are those the costs of which are allocated on the basis of the departments' total expenditures, including all operating and capital expenditures. Examples of costs in this category presently include accounting and budget and analysis functions of the Bureau of Finance. The SFPUC charge, both Class A and Class B, is presently identified in the HHWPD cost ledgers as Account No. 840920-3600.

SFPUC charges shall be allocated to HHWPD in the same manner and subject to the same restrictions as such charges are allocated to SFWD, as described in Section 4.04(b).

Allocation: SFPUC charges allocated to HHWPD shall be reallocated between water and power as follows:

(i) Class A charges: Class A SFPUC charges allocated to HHWPD shall be reallocated to water on the basis of a percentage derived from a fraction the numerator of which is the sum of all water-related HHWPD operating and maintenance expenses, as defined herein, for the fiscal year in question, including 45% of joint operating and maintenance expenses, but excluding City overhead and SFPUC charges, and the denominator of which is total HHWPD operating and maintenance expenses but excluding purchased power, wheeling charges, rentals of power lines, maintenance of MUNI overhead lines expenses, City overhead and SFPUC charges.

The formula for allocation of Class A SFPUC costs is shown in Exhibit G-2.

(ii) Class B charges: Class B SFPUC charges allocated to HHWPD shall be reallocated to water on the basis of a percentage derived from a fraction the numerator of which is the sum of all HHWPD water-related operating and maintenance expenses, as defined herein, for the year in question, including 45% of joint operating and maintenance expenses (but excluding City overhead and SFPUC charges) plus water-related capital outlays, however funded, including 45% of capital outlays on joint facilities, and the denominator of which is total HHWPD operating and maintenance expenses, including all water-specific, joint and power-specific expenses (except City overhead and SFPUC charges), plus total HHWPD capital outlays, however funded.

Total HHWPD operating and maintenance expenses shall, for purposes of this subsection (ii), include purchased power, wheeling and rentals of power lines expenses of HHWPD, if each is included in the HHWPD's total expenditures for purposes of allocating SFPUC expenses to it. If one or more of such expenses are excluded from the definition of total budget for purposes of the initial allocation to the operating departments, it or they shall similarly be excluded in this formula for allocation of Class B SFPUC charges between water and power.

The formula for allocation of Class B SFPUC costs is shown on Exhibit G-2.

(2) *Maintenance Expenses.*

Description: This category consists of expenses incurred in maintaining physical facilities within the HHWPD jurisdiction and related administrative and general expenses. Expenses associated exclu-

sively with maintaining power facilities such as generating plants, transmission lines and MUNI overhead lines are categorized as power-specific and are not allocated to water. Expenses associated with maintaining facilities which serve both the water and power functions (such as dams) are categorized as "joint" and are allocated to each function as described below. Expenses associated exclusively with the maintenance of facilities which serve only the water function (such as water transmission lines) are categorized as water-specific and are allocated entirely to water.

Allocation: Water-specific maintenance expenses presently consist of the line items in the HHWPD cost ledgers so designated on Exhibit G-3. These expenses shall be allocated entirely to water.

Power-specific maintenance expenses presently consist of the line items in the HHWPD cost ledgers so designated on Exhibit G-3. These expenses shall be allocated entirely to power.

Joint maintenance expenses presently consist of the line items in the HHWPD cost ledgers so designated on Exhibit G-3. These expenses shall be allocated 55% to power and 45% to water.

(3) *Property Taxes.*

Description: This category consists of ad valorem property taxes levied against HHWPD properties located in Tuolumne, Stanislaus, San Joaquin and Alameda Counties. These are presently identified in the HHWPD cost ledgers as Account No. 840928-1425.

Allocation: All property taxes paid by HHWPD shall be deemed a joint expense and shall be allocated to water on the basis of a "utility plant percentage" derived from a fraction, the numerator of which is the average-for-the-year net book value of all HHWPD water-related assets located outside the City's geographical limits, however funded (including 45% of all HHWPD joint assets located outside the City's geographical limits, however funded) and the denominator of which is the average-for-the-year net book value of all HHWPD assets located outside the City's geographical limits, however funded. An illustration of the formula for allocation of property taxes is shown on Exhibit G-4.

(4) *Calculation of Return on Water-Related Portion of HHWPD Rate Base.*

The return on the water-related portion of the HHWPD rate base is the product of (1) the water-related portion of the total HHWPD rate base times (2) the overall rate of return. Each component shall be calculated as set forth below.

(i) *Calculation of Water-Related Portion of HHWPD Rate Base.*

The water-related portion of HHWPD rate base used for calculating return shall be the sum of (1) the average of the water-related portion of HHWPD net utility plant in service at the beginning of the year and the water-related portion of HHWPD net utility plant in service at the end of the year (i.e., the beginning water-related portion of HHWPD net utility plant in service plus capital additions less depreciation, retirements and other dispositions removing an asset from utility plant in service) and (2) a water-related HHWPD working capital allowance equal to one-sixth (1/6) of the HHWPD water-related operating expenses and maintenance expenses, as defined above, which do not include property taxes.

The water-related portion of HHWPD net utility plant shall be the sum of the net book values, determined on the basis of depreciated original cost, of: (1) all bond-funded, water-specific HHWPD assets included in net utility plant in service as of June 30, 1984; (2) 45% of the net book value of all bond-funded, joint HHWPD assets included in net utility plant in service as of June 30, 1984; and (3) all water-specific and a portion of all joint HHWPD assets, however funded, added to net utility plant in service after June 30, 1984, except for assets, or portions thereof, funded from federal or state grants or direct user contributions. Thus, assets added to utility plant during fiscal year 1983/84 and funded from revenue shall not be included in the HHWPD water-related rate base for

purposes of this Agreement. (A list of the revenue-funded assets which the City expects to add to the HHWPD utility plant during fiscal year 1983/84 is shown in Exhibit H-3; these assets will not be included in the HHWPD water-related rate base for purposes of this Agreement regardless of whether they are actually placed into service during FY 1983/84 or thereafter.)

If the City finances the acquisition of new assets for the HHWPD by means other than from revenues or through bonded debt (e.g., by means of leases), the capitalization of those assets, the treatment of related expenses and related debt, and all other aspects of their accounting treatment, for purposes of this Agreement, shall be in accordance with Generally Accepted Accounting Principles, as amended from time to time.

The net book value of all debt-funded assets included in net utility plant in service as of June 30, 1983 and their categorization as power-specific, water-specific or joint is shown in Exhibits H-1 and H-2. The City will furnish the Suburban Representatives a list of all debt-funded assets, together with the asset number, category, net book value, service life and annual depreciation for each, added to the HHWPD water-related utility plant during FY 1983/84. This list will be delivered on or before December 31, 1984.

The categorization of new assets as water-specific, power-specific or joint and the portion of new joint assets to be allocated to water-related net utility plant in service after June 30, 1983 shall be as agreed upon by the parties and, in the event they are unable to agree, by arbitration as provided in Section 8.02. The arbitrator shall be directed to resolve the dispute by reference to accepted cost-allocation methodologies (or modifications thereof) and in a way which fairly allocates the cost of a new facility to or between the function(s) which it will serve. Debt-funded assets scheduled to be added during FY 1983/84 shall be categorized as shown in Exhibit H-4.

Interest on new debt-funded assets shall be capitalized in accordance with applicable Generally Accepted Accounting Principles, as amended from time to time.

(ii) *Calculation of Overall Rate of Return.*

The overall rate of return on the water-related portion of HHWPD rate base is equal to the sum of (1) the product of the cost of HHWPD water-related debt times the HHWPD water-related debt percentage and (2) the product of the return on HHWPD water-related equity times the HHWPD water-related equity percentage.

Each of these terms shall be defined and/or derived as follows:

(1) The cost of HHWPD water-related debt is the water-related debt interest expense for the year divided by the average outstanding balance of water-related debt. At any given date, water-related debt outstanding is that portion of total debt outstanding, the proceeds of which have been used to finance the construction or acquisition of water-related assets included in HHWPD net utility plant in service, as of that date. The average outstanding balance of HHWPD water-related debt is the beginning of the year balance plus the end of the year balance, divided by 2. The cost of HHWPD water-related debt for FY 1983/84 is estimated to be 3.8936%, as shown in Exhibit D-2.

(2) The HHWPD water-related debt percentage is the percentage obtained by dividing the average outstanding balance of HHWPD water-related debt by the sum of (a) the average-for-the-year net book value of water-related assets, as defined above, plus (b) the water-related HHWPD working capital allowance, as defined above.

The HHWPD water-related debt percentage for FY 1983/84 is estimated at 14.27%. In subsequent years, water-related HHWPD debt shall include all outstanding City debt the proceeds of which are used to construct or acquire water-specific HHWPD assets and a portion of all outstanding City debt the proceeds of which are used to construct or acquire joint HHWPD assets. The water-related portion of any debt issued in the future, some or all of which is used

to construct or acquire HHWPD assets, shall be equal to a fraction, the numerator of which shall be the original cost of water-related utility plant assets financed by the proceeds of such debt (determined as provided in Section 4.08(a)(4)(i)) and the denominator of which shall be the total proceeds of such debt.

The water-related share of currently outstanding debt shall be as shown in Exhibit D-2.

(3) The return on HHWPD water-related equity shall be equal to the return on SFWD wholesale equity defined in Section 4.06(c)(iii).

(4) The HHWPD water-related equity percentage is equal to 100% minus the HHWPD water-related debt percentage.

The methodology for calculating the overall rate of return on HHWPD water-related rate base is shown on Exhibit F-2.

(5) *Calculation of HHWPD Water-Related Depreciation.* Water-related depreciation is the annual depreciation expense on the original cost of assets in the water-related portion of HHWPD utility plant in service. The "original cost" of each asset used for calculating depreciation for purposes of this Agreement shall be equal to the original cost of each asset in the water-related portion of HHWPD utility plant in service minus any revenue-funded portions thereof (including capitalized interest funded from revenue) added to the rate base prior to June 30, 1984 and any portion of the asset financed from federal or state grants or direct user contributions.

The original cost, salvage value, service lives and annual depreciation expense of all debt-funded water-related assets included in HHWPD utility plant in service as of June 30, 1983 shall be as shown in Exhibit H-1. (No depreciation expense will continue for any asset once that asset has no remaining service life; however, such assets will continue to be included in the rate base at their salvage value, if any.) Water-related assets added to utility plant after June 30, 1983 shall be assigned reasonable service lives and salvage values consistent with waterworks industry standards and practices. Debt-funded assets scheduled to be added during FY 1983/84 shall be assigned service lives as shown in Exhibit H-4.

Depreciation shall be calculated on a straight line basis.

(b) *Calculation of Suburban Purchasers' Share of Suburban Hetch Hetchy Assessment.*

The suburban purchasers' share of the Assessment shall be calculated as follows:

(i) The suburban purchasers' share of HHWPD water-related operating expenses, maintenance expenses and property taxes shall be derived by multiplying the total of such expenses times the suburban current base rate, times a fraction, the numerator of which is the amount of water delivered to the SFWD by HHWPD during the fiscal year and the denominator of which is the amount of water delivered by the HHWPD to all users who receive water from it, during that year.

(ii) The suburban purchasers' share of return on HHWPD water-related rate base and water-related depreciation shall be derived by multiplying each times the suburban ultimate base rate (64.56%), times a fraction the numerator of which is the amount of water delivered to the SFWD by HHWPD during the fiscal year and the denominator of which is the amount of water delivered by the HHWPD to all users who receive water from it, during that year.

ARTICLE V

INTEGRATION OF SUBURBAN REVENUE REQUIREMENT WITH SFWD BUDGET DEVELOPMENT AND RATE ADJUSTMENTS

Section 5.01. *General Purpose.*

The purpose of the allocational formulas set forth in Article IV is to determine the suburban revenue requirement for each fiscal year. The suburban revenue requirement can only be estimated in advance, based upon projected costs and water usage. These projections will be used to establish rates applicable to the suburban purchasers, which rates will be designed to produce the estimated suburban revenue requirement.

After the close of each fiscal year, the procedures described in Article VI will be conducted to determine the actual suburban revenue requirement, based on actual costs incurred, allocated according to the formulas agreed upon, and utilizing actual water usage data. The amount properly allocable to the suburban purchasers pursuant to this Agreement shall be compared with the actual revenues received from the suburban purchasers during the fiscal year under review, as shown in the official accounting records of the SFWD. If the actual payment by the suburban purchasers is less than or more than the amount properly allocable to them under this Agreement (i.e., the actual suburban revenue requirement), the amount of the excess or deficit shall be entered in a "balancing account" (as described in Section 5.07) to be charged or credited to the suburban purchasers, as the case may be.

The amount of such charge or credit shall then be taken into account in determining the necessity for rate increases or decreases in the next ensuing fiscal year (e.g., FY 1986/87 for the amount posted to the balancing account for FY I984/85) in the manner described in Section 5.07(b). Rates for the suburban purchasers will be increased or decreased as necessary to reflect the amount in the balancing account and the estimated suburban revenue requirement for that year, in accordance with the provisions of Section 5.07(b).

Section 5.02. *Budget Development.*

Two weeks before the submission of the annual SFWD and HHWPD budgets to the City's Public Utilities Commission, the General Manager of the SFWD and the General Manager of the HHWPD shall meet with the suburban purchasers to review and explain the proposed budgets of each Department for the ensuing fiscal year. The General Manager of the SFWD and the General Manager of the HHWPD may each designate an appropriate official of their respective departments to attend this meeting in his or her place, if, because of illness or other reasons beyond their control, he or she is unable to attend. Each suburban purchaser may nominate no more than one representative to attend this meeting and the City shall not be obligated to hold more than one such budget review meeting with the suburban purchasers in each fiscal year.

At least two weeks before this meeting, the City shall mail copies of the following documents to the Suburban Representatives appointed pursuant to Section 8.13:

1. Proposed SFWD operating and capital budgets for the ensuing fiscal year.
2. The SFWD's and HHWPD's most recent update of the current year's expenditures (the organization management performance report) and the balance sheet and income statement for the most recent fiscal year, if available.
3. Proposed HHWPD operating and capital budgets for the ensuing fiscal year.
4. Detailed calculation of the proposed Suburban Hetch Hetchy Assessment.
5. Projected bond sales, if any, for SFWD and HHWPD for the ensuing fiscal year.
6. Estimated City and Suburban consumption for the ensuing fiscal year.

Thereafter, the budget request of the General Manager of Utilities shall be sent to the Suburban Representatives at the same time it is sent to the SFPUC. Except for changes authorized by Section 5.03(b), any proposed changes in the structure of the rate schedule(s) applicable to the suburban purchasers for the ensuing fiscal year shall similarly be sent to the Suburban Representatives by five months prior to the start of the fiscal year or whenever they are available, whichever is sooner. All suburban purchasers shall be notified at least five days in advance of the date on which the SFPUC will hold hearings on the budget request.

The City will use its best efforts to provide the documents and hold the meetings in accordance with the foregoing schedule. However, the failure of the City to comply with the requirements set forth in this Section shall not invalidate any action taken by the City (including, but not limited to, any rate increase or decrease adopted by the City). In the event of such failure, the suburban purchasers may either invoke arbitration, as set forth in Section 8.02, or seek injunctive relief, to compel the City to remedy the failure as soon as is reasonably practical, and the City shall be free to oppose issuance of the requested judicial or arbitral relief on any applicable legal or equitable basis. The existence of this right to resort to arbitration shall not be deemed to preclude the right to seek injunctive relief.

The provisions of this Section requiring a meeting with the General Managers are not intended to preclude the suburban purchasers from appearing before the SFPUC or the City Board of Supervisors concerning the SFWD budget and/or suburban water rates.

Section 5.03. *Rate Adjustments.*

(a) *Budget-Coordinated Rate Adjustments.* Adjustments to the SFWD rate schedules that affect the suburban purchasers shall be coordinated with the budget development process in the manner set forth in this Section except to the extent that Section 5.03(b) authorizes emergency rate adjustments.

Should the City desire to increase the rates applicable to the suburban purchasers during the ensuing fiscal year in conjunction with the budget development process, the General Manager of Utilities shall prepare and distribute to the Suburban Representatives at the same time and in addition to the information required to be sent to the Suburban Representatives by Section 5.02, a tabulation based on the most recent budget which shows the following data:

(i) Projected revenue from the suburban purchasers for the ensuing fiscal year based on existing rates and estimated suburban consumption.

(ii) An estimate of how projected SFWD operating and maintenance expenses and property taxes for the ensuing fiscal year will be allocated between direct City, joint, and direct suburban categories pursuant to the methodology set forth in this Agreement and an estimate of how the joint operating and maintenance expenses and property taxes will be allocated between the suburban purchasers and the City pursuant to the methodology set forth in this Agreement.

(iii) Calculation of projected SFWD administrative and general expenses (including an estimate of how projected City overhead and the SFPUC charges will be allocated to the SFWD pursuant to the methodology set forth in this Agreement) and an estimate of how these administrative and general expenses will be allocated between the City and the suburban purchasers pursuant to the methodology set forth in this Agreement.

(iv) The projected Hetch Hetchy Assessment (including an estimate of how projected City overhead and the SFPUC charges will be allocated to HHWPD pursuant to the methodology set forth in this Agreement), and an estimate of how HHWPD expenses (including City overhead and SFPUC charges) will be allocated between water and power pursuant to the methodology set forth in this Agreement.

(v) Description of the assets to be added to the SFWD wholesale rate base and the HHWPD water-related rate base in the next fiscal year, including the proposed assignment of such assets into the categories described in Article IV and the resulting allocation of such assets between the City and the suburban purchasers; computation of the projected effective interest rate on

outstanding SFWD wholesale debt and outstanding HHWPD water-related debt; and the projected rate of return on equity for the SFWD wholesale rate base and the HHWPD water-related rate base.

In addition to the foregoing, the City shall distribute to the Suburban Representatives (i) copies of any proposed changes in the rate schedules, together with supporting documentation, at the time such materials are forwarded from the General Manager of the SFWD to the General Manager of Utilities; and (ii) copies of any proposed resolution submitted to the SFPUC calling a hearing on the proposed changes to the rate schedules, at the time such proposed resolution is submitted to or adopted by the SFPUC, whichever is earlier. At the time the material in (i), *supra*, is furnished to the Suburban Representatives, the Suburban Representatives shall also be sent the calculations required to be performed by Section 5.07(b) of the Estimated Suburban Revenue Requirement for the fiscal year for whicb rates are being set, the Revenue Discrepancy to be used for that fiscal year, and the Estimated Suburban Payment for that year.

The City will use its best efforts to provide the suburban purchasers with the information described above. However, the failure of the City to comply with the requirements set forth in this Section shall not invalidate any action taken by the City (including, but not limited to, any rate increase or decrease adopted by the City). In the event of such failure, the suburban purchasers may either invoke arbitration, as set forth in Section 8.02, or seek injunctive relief, to compel the City to remedy the failure as soon as is reasonably practical, and the City shall be free to oppose the issuance of the requested judicial or arbitral relief on any applicable legal or equitable basis. The existence of this right to resort to arbitration shall not be deemed to preclude the right to seek injunctive relief.

Because delays in the budget process or other events may cause the City to defer the effective date of rate adjustments applicable to the suburban purchasers until after the beginning of the City's fiscal year, nothing contained in this Agreement shall require the City to make any changes in the water rates charged to the suburban purchasers effective at the start of the City's fiscal year or at any other specific date. Nothing in the preceding sentence shall excuse non-compliance with the provisions of Section 5.02 and this Section.

(b) *Emergency Rate Increases.*

(1) The City may increase the water rates applicable to the suburban purchasers without complying with Section 5.03(a) if a drought, earthquake, other act of God, malfunctioning of the City's water delivery system or other emergency requires an increase in rates, prior to the date by which a rate increase adopted in conjunction with the next budget-coordinated rate review would become effective, to meet the SFWD's wholesale or the HHWPD's water-related estimated operating and capital expenses (i.e., debt service and capital outlays) in light of the emergency. Rates may be increased under this subsection to cover capital expenses only if the SFWD does not have sufficient unappropriated funds available for use and is unable to obtain sufficient funds, in the time necessary, through the issuance of bonds or from State or federal grants. Rates may be increased under this subsection to cover operating expenses (including Operating and Maintenance expenses and Administrative and General expenses) without regard to the existence of alternative means of financing such expenses. Any such emergency rate increase shall be accompanied by a rate increase for direct City water users of at least an equal percentage. Any such emergency rate increase need not be spread uniformly within the two classes (i.e., the class of direct City water users and the class of suburban purchasers) as long as the overall percentage increase for the suburban purcbasers is no greater than the overall percentage increase for the direct City water users.

(2) The City may increase the water rates applicable to the suburban purchasers without complying with Section 5.03(a) to implement a water allocation plan imposed during times of water shortage pursuant to Section 7.03, as long as such changed rates impose no greater burdens on the suburban purchasers than on direct City water users for failure to abide by the allocation plan.

(3) The City will give the Suburban Representatives no less than ten days notice of the hearing before the SFPUC on a proposed emergency rate increase under Section 5.03(b)(1) or 5.03(b)(2); however, the failure of the City to provide such notice shall not invalidate any action taken by the City (including, but not limited to, any rate increase adopted by the City) unless the City has failed to substantially comply with this notice requirement. Any revenue derived from rates increased pursuant to Section 5.03(b)(1) or 5.03(b)(2) shall be subject to the balancing account described in Section 5.07. No rate increase authorized by Section 5.03(b)(1) or 5.03(b)(2) shall remain in effect for longer than eighteen months.

Section 5.04. *Rate Structure.*

Prior to August 1, 1983, the City determined water bills for individual suburban purchasers by reference to Schedule W-25 (Resale Use with Long Term Contract) contained in the Rate Schedules for Water Service as established by Resolution 79-0474 of the SFPUC on November 27, 1979. The City has amended this rate schedule, effective August 1, 1983 and expects to amend the rate schedule(s) applicable to the suburban purchasers additionally as needed during the Term of this Agreement to generate the estimated suburban revenue requirement for each fiscal year. This Agreement is not intended and shall not be construed to limit the City's right to adjust the structure of the rate schedule applicable to the suburban purchasers (i.e., the relationship among the several charges set out therein) nor shall anything in this Agreement be construed to limit the City's freedom to add, delete, or change the various charges which make up the rate schedule, provided that neither such charges nor the structure of the rate schedule(s) applicable to the suburban purchasers shall be arbitrary, unreasonable, or unjustly discriminatory as among said purchasers. (Nothing in the preceding sentence shall be construed or interpreted in derogation of the waiver in Section 5.05 of any claim by the suburban purchasers that the suburban revenue requirement, as determined by the provisions of and the methodology provided by this Agreement, is illegal, unreasonable, arbitrary or discriminatory in any manner.) The City will give careful consideration to proposals for changes in the rate schedule made jointly by the suburban purchasers but, subject to the limitations set out above, shall retain the sole and exclusive right to determine the structure of the rate schedule. The City will not change the structure of Schedule W-25 for three years (i.e., until the rates applicable to FY 1987/88) in order to allow time for the suburban purchasers to complete and submit a study of the rate schedule's structure now underway and for the SFPUC to consider it. Notwithstanding the preceding sentence, the City shall be free to make changes in the structure of the rate schedule within the three-year period to implement a water allocation plan imposed during times of water shortage pursuant to Section 7.03, provided that any such changed rate schedule shall impose no greater burdens on the suburban purchasers than on direct City users for failure to abide by the allocation plan. The City will endeavor insofar as it is reasonably practical to set forth the rates applicable to the suburban purchasers on a single rate schedule.

Section 5.05. *Waiver and Reservation re Methodology for Determining Suburban Revenue Requirement.*

(a) The suburban purchasers have heretofore asserted a right to water at cost by reason, among others, of rights claimed to be conferred by the Raker Act, and City has heretofore denied such assertions and claims. The purpose of this Agreement is to settle and compromise the different positions of the parties hereto as to said assertions and claims for the Term of this Agreement and nothing contained herein shall constitute an admission by any party hereto affecting, modifying, abrogating, limiting, or conceding its position as regards such assertions and claims, or as a waiver of its position, either in whole or in part. In particular, and without limitation, the suburban purchasers do not waive, and specifically reserve, their claim that the methodology employed under this Agreement for determination of the suburban revenue requirement (the "utility enterprise method") is not proper or valid under state and federal law (including, but not limited to, the Raker Act) and the

City does not waive, and specifically reserves, its claims that said methodology is proper and valid and does not violate state or federal law (including, but not limited to, the Raker Act), and that the rates generated by said methodology will produce less revenue to the City than would be justified by the full cost of the water delivered or is otherwise proper under state or federal law (including, but not limited to, the Raker Act.)

(b) Notwithstanding subsection (a), *supra*, in order to effect the settlement and compromise of the disputes of the parties during the Term of this Agreement, each suburban purchaser hereby covenants and agrees on its own behalf, and on behalf of all persons and entities to which it sells water, that it will not contend, during the Term of this Agreement, before any court or administrative tribunal or official, that the suburban revenue requirement, as determined by the provisions of and the methodology provided by this Agreement violates any provision of federal law (including, but not limited to, the Raker Act), state laws or the Charter of the City and County of San Francisco, or is unfair, illegal, unreasonable, arbitrary or discriminatory in any manner, except that the suburban purchasers expressly reserve, as provided in Section 8.01, the right to so contend as to any attempt by the City to include a charge for reduced net power revenues in the price of additional water over the amount specified in the Supply Assurance set forth in Section 7.01.

(c) Nothing contained in this Section shall prevent any suburban purchaser from pursuing any remedy provided by this Agreement for breach or violation of this Agreement or from seeking to enforce performance of the Agreement's terms and conditions.

Section 5.06. *Exclusions from Rate-Making Procedures.*

(A) The suburban purchasers shall not be charged with any of the following:

(1) any expense associated with the City's furnishing free water to its municipal departments (sometimes heretofore identified in the SFWD accounts as "Municipal Tax-Comparison");

(2) any expense associated with the City's accruals or allowances for uncollectible water accounts;

(3) any expense incurred by the City in hiring outside counsel to assist in arbitration and/or litigation concerning the respective rights and obligations of the City and the suburban purchasers under this Agreement;

(4) attorneys' fees incurred by the suburban purchasers which a court of competent jurisdiction orders the City to pay as part of a final, binding judgment against the City;

(5)(a) any expenses associated with creating or maintaining any reserves (other than the working capital component included in the SFWD and HHWPD rate bases, depreciation, and reserves for accounts payable expenses accrued and expected to be paid within one year, all as provided in Article IV);

(b) any expenses accrued in respect to pending or threatened litigation, damage or personal injury claims and other loss contingencies, accruals of which are required by the Financial Accounting Standard Board Statement No. 5 (March 1975) as amended; such expenses will, to the extent provided in Article IV, be charged to the suburban purchasers when they are actually paid;

(6) any expenses of installing, relocating, enlarging, removing, or modifying meters and service connections that are directly chargeable to and payable by the individual suburban purchaser for which the service is rendered pursuant to Section 8.15; or

(7) any expenses associated with the provision by the SFWD or the HHWPD to a suburban purchaser of any good or service other than the sale of water.

(B) The suburban purchasers shall not receive any credit for either of the following:

(1) any SFWD or HHWPD non-operating revenue or interest earned on SFWD or HHWPD funds;

(2) any HHWPD income derived from water sales to persons or entities other than the SFWD.

Section 5.07. *Balancing Account.*

(a) *Operation.* After the close of each fiscal year, the City will compute the amount properly allocable to the suburban purchasers for that fiscal year pursuant to this Agreement based upon the actual costs incurred by the SFWD and HHWPD during the year in the categories described in Article IV and the actual suburban water usage rates, based upon the records of water deliveries maintained by the SFWD and HHWPD. This amount ("the final suburban revenue requirement" described in Section 6.02) will be compared to the actual revenues received from the suburban purchasers during the fiscal year under review, as shown in the official accounting records of the SFWD.

If the actual revenues received from the suburban purchasers for sales of water are more than the final suburban revenue requirement, the amount of the excess shall be posted to a "balancing account" to the credit of the suburban purchasers. If the actual revenues received from the suburban purchasers for sales of water are less than the final suburban revenue requirement, the amount of the deficit shall be posted to the balancing account as a charge against the suburban purchasers. There shall also be posted to the balancing account interest for the fiscal year under review equal to the product of the opening cumulative balance in the balancing account at the beginning of such year times the interest rate received by the City during such year on its invested pooled funds (as shown in the City Treasurer's Annual Report for that year). Interest, when posted, shall carry the same mathematical sign, whether positive or negative, as was carried by the opening cumulative balance for that year. The amount posted to the balancing account in each year shall be added to or subtracted from, as the case may be, the balance in the account from prior years to obtain the cumulative balance in the balancing account.

The parties recognize that a proposed amendment to the City Charter will be submitted to the voters of the City in June 1984 which would require that the Treasurer maintain all gross revenues of the SFWD in a separate fund whenever certain SFWD revenue bonds are outstanding. If this or a similar provision becomes effective and the City Treasurer is required to establish a "water department revenue fund" separate and apart from the funds of other City departments, the applicable interest rate for purposes of computing interest under this Section shall be the interest rate received by the SFWD on its invested funds and shall be calculated in the same manner as the Controller calculates the interest rate received by the City on its invested pooled funds.

There shall be no interest posted to the balancing account until the amount for the fiscal year ending June 30, 1988 has been posted to the balancing account. The first opening balance to which interest shall be added shall be the opening balance for fiscal year 1988/89.

(b) *Methodology for Utilizing Balancing Account in Budget Coordinated Rate Adjustment Process.* The purpose of this subsection is to establish a procedure which attempts to clear cumulative balances in the balancing account by taking previously posted overcharges or undercharges by the City into account for prospective rate making purposes, in accordance with the methodology described in this subsection. However, this methodology shall have no effect whatsoever upon the amount actually posted to the balancing account for any particular fiscal year or upon the cumulative balance in the balancing account. These matters shall in all cases be determined in accordance with Section 5.07(a), based upon the actual revenues received from the suburban purchasers in that year and the Final Suburban Revenue Requirement for that year, as audited in accordance with Article VI.

For prospective rate making purposes, whether rates applicable to the suburban purchasers are to be increased or reduced for a particular fiscal year shall be determined by a comparison between the Estimated Suburban Payment and the Adjusted Estimated Suburban Revenue Requirement for that year, in accordance with the following methodology:

In conjunction with the budget development process described in Sections 5.02 and 5.03, the City shall estimate, without regard to the amount in the balancing account, (1) the suburban revenue requirement for the fiscal year for which the budget is being developed (the "Estimated Suburban Revenue Requirement"), and (2) the total suburban payments which would be made during that fiscal year at existing rates and projected levels of water consumption, (the "Estimated Suburban Payment").

The Estimated Suburban Revenue Requirement shall then be adjusted by subtracting therefrom the Revenue Discrepancy (as defined in the next paragraph) to produce the "Adjusted Estimated Suburban Revenue Requirement." (For example, in setting rates for the fiscal year 1990/91, the City shall, in the fiscal year 1989/90, estimate the Estimated Suburban Revenue Requirement for 1990/91, and then shall subtract therefrom the Revenue Discrepancy to produce the 1990/91 Adjusted Estimated Suburban Revenue Requirement.)

The Revenue Discrepancy to be used for the fiscal year for which rates are being set (e.g., 1990/91) shall be determined as follows:

(1) In the fiscal year during which the rates are being set (e.g., 1989/90), the ending balance in the balancing account for the prior completed fiscal year (e.g., 1988/89) shall be determined. This procedure is described in Steps A and B of Exhibit O.

(2) To the ending balance in the balancing account for the prior completed fiscal year (e.g., 1988/89), there shall be added (a) estimated interest for the current fiscal year (i.e., the fiscal year in which the budget is being developed (e.g., 1989/90)), as shown in Step C-1 of Exhibit O, and (b) the Estimated Revenue Differential for the current fiscal year. The Estimated Revenue Differential shall be determined by subtracting from the Current Expected Suburban Payment (as defined below) for the current fiscal year (e.g., 1989/90), the Estimated Suburban Revenue Requirement (as defined hereinabove) for the current fiscal year (e.g., 1989/90). (The calculation of the Estimated Revenue Differential is described in Step C-2 of Exhibit O.) The sum resulting from the operations described in this sub-paragraph shall be called the Required Revenue Adjustment. (See Step C-3 of Exhibit O.)

(3) To the Required Revenue Adjustment there shall be added estimated interest for the fiscal year for which the budget is being developed (e.g., 1990/91). This procedure is described in Step C-4 of Exhibit O.

(4) The sum resulting from the additions described in sub-paragraphs (1) through (3) above is the Revenue Discrepancy to be used for the fiscal year for which rates are being set (e.g., 1990/91).

If the Adjusted Estimated Suburban Revenue Requirement for the fiscal year for which the rates are being set (e.g., 1990/91) exceeds the Estimated Suburban Payment for such fiscal year, then rates applicable to the suburban purchasers may be increased to generate the Adjusted Estimated Suburban Revenue Requirement ± $50,000, at projected levels of water consumption.

If the Estimated Suburban Payment for such fiscal year (e.g., 1990/91) exceeds the Adjusted Estimated Suburban Revenue Requirement for such year by more than two percent (2%), then rates applicable to the suburban purchasers shall be reduced to generate the Adjusted Estimated Suburban Revenue Requirement ± $50,000, provided that nothing contained in this Agreement shall either prohibit or compel a rate reduction if such excess is two percent (2%) or less.

The Current Expected Suburban Payment for any given fiscal year shall mean the amount of revenue expected to be received by the City in that fiscal year based on the rates which it adopted for that fiscal year and the levels of water consumption projected for that fiscal year when that fiscal year's rates were set.

In performing the algebraic operations required by the foregoing methodology, the proper signs, whether negative or positive, of the numbers to be added or subtracted shall be taken into account.

In ascertaining the Revenue Discrepancy pursuant to this subsection for any given fiscal year, final audited figures shall be used as that fiscal year's opening balance in the balancing account, the Actual Suburban Revenues Received in that fiscal year, the Final Suburban Revenue Requirement for that fiscal year, and that fiscal year's ending balance in the balancing account. If final audited figures are not available, unaudited figures shall be used, but only for the purposes of carrying out the methodology described in this subsection.

In applying the methodology described above, the interest rate used to calculate the estimated interest for the current fiscal year and the next fiscal year shall be equal to the interest rate which was applied to the opening balance in the balancing account for the immediately preceding completed fiscal year pursuant to Section 5.07(a). (For example, when setting rates for the fiscal year 1990/91, the interest rate used for calculating the estimated interest for fiscal year 1989/90 and fiscal year 1990/91 shall be equal to the interest rate specified in Section 5.07(a) for fiscal year 1988/89.)

In implementing the methodology described in this subsection, the following qualifications shall apply:

This subsection shall not apply to rate-making for the fiscal year 1985/86. This subsection shall apply to rate-making for the fiscal year 1986/87, but: (1) the opening balance for fiscal year 1984/85 shall be equal to zero; (2) the Estimated Revenue Differential for the fiscal year 1985/86 shall be deemed equal to zero; and (3) no interest charges, either actual or estimated, shall be used in applying the foregoing methodology to rate-making for that fiscal year. This subsection shall apply to rate-making for the fiscal year 1987/88, but no interest charges, either actual or estimated, shall be used in applying the foregoing methodology to rate-making for that fiscal year. This subsection shall apply to rate-making for the fiscal year 1988/89, but no interest charges shall be added pursuant to Steps B-2 (e.g., for fiscal year 1986/87) and C-1 (e.g., for fiscal year 1987/88) in Exhibit O in applying the methodology to rate-making for that year; the estimated interest rate to be applied for the fiscal year 1988/89 under Step C-4 of Exhibit O shall be the interest rate specified in subsection 5.07(a) which would have been applied to the cumulative balance in the balancing account for the fiscal year 1986/87 but for the moratorium on interest specified in subsection 5.07(a). This subsection 5.07(b) shall apply to rate-making for the fiscal year 1989/90, but: (1) no interest charges shall be added pursuant to Step B-2 in Exhibit O (i.e., interest for the fiscal year 1987/88); and (2) the estimated interest rate to be applied for the fiscal year 1988/89 (under Step C-1 of Exhibit O) and for the fiscal year 1989/90 (under Step C-4 of Exhibit O) shall be the interest rate specified in subsection 5.07(a) which would have been applied to the cumulative balance in the balancing account for the fiscal year 1987/88 but for the moratorium on interest specified in subsection 5.07(a).

In setting rates for each fiscal year thereafter during the Term of this Agreement, commencing with setting rates for the fiscal year 1990/91, the methodology described in this subsection shall apply without qualification.

(c) *Exclusions from Revenue.* For purposes of this Section, "actual revenues received from the suburban purchasers for sales of water" shall not include: (1) amounts, if any, paid by any suburban purchaser, pursuant to Section 8.14, for water delivered through the SFWD's in-City water distribution system, in excess of the average charge per ccf. of water it and the other suburban purchasers pay for water not delivered through the SFWD's in-City water distribution system; (2) any amount directly paid by a suburban purchaser for the installation, relocation, or removal of meters and service pursuant to Section 8.15, the City's W-41 rate schedule, and Section E(8) and (9) of the SFWD's Rules and Regulations Governing Water Service to Consumers, as they may be amended from time to time; or (3) any other amounts received by the SFWD from a suburban purchaser for goods or services other than the sale of water.

(d) *Arbitration.* The City's implementation of Section 5.07(a) and (b) is subject to the arbitration remedy provided in Section 8.02, in accordance with the limitations on that remedy provided for herein. In the event that the methods that the City has used to estimate suburban revenue requirements and/or suburban payments have caused a persistent cumulative credit to the suburban purchasers in the balancing account resulting in a cumulative balance of seven and one-half percent of the annual suburban revenue requirement for any individual fiscal year, the suburban purchasers may invoke the arbitration remedy set forth in Section 8.02 and the arbitrator shall have discretion to enter either or both of the following orders:

(1) If the arbitrator finds that the existence of such persistent, cumulative credit demonstrates that the procedures set forth above in Section 5.07(b) are not functioning to clear the balancing account, the arbitrator may enter an order that the City refund to the suburban purchasers the cumulative credit in the balancing account. This refund shall take the form of a credit divided into twelve equal monthly installments to be offset against the monthly water bills sent to the suburban purchasers during the fiscal year in which rates adopted in conjunction with the next budget-coordinated rate review following the arbitration award would become effective, provided that in no event will the refund be commenced later than 18 months from the arbitration award. The credit shall be allocated among the suburban purchasers in accordance with their pro rata share of all water purchased by the suburban purchasers from the City during the fiscal year immediately prior to the year in which the demand for arbitration was served.

(2) If the arbitrator finds that such an order is necessary to prevent a repetition of the persistent cumulative credit, the arbitrator may enter an order that the City cease using the method of estimating suburban revenue requirements and/or suburban payments that have caused the persistent cumulative credit to the suburban purchasers in the balancing account.

The arbitration remedy shall be the exclusive remedy for any claimed violation by the City of Section 5.07(a) and (b).

(e) *Disposition of Ending Balance.* After the expiration of the Term, the audit procedures described in Article VI will be performed for the final year of the Term and the cumulative ending balance in the balancing account (including the results of that year's operations) will be determined.

The ending balance, if a credit in favor of the suburban purchasers, will be refunded to the suburban purchasers and, if a charge against them, shall be collected from them. The refund or collection shall take the form of a credit or surcharge divided into twelve equal monthly installments to be offset against or added to the monthly water bills sent to the suburban purchasers during the fiscal year immediately following the determination of the ending balance (i.e., FY 2010/11). The credit or surcharge shall be allocated among the suburban purchasers receiving or subject to it (i.e., those purchasing water from the City during FY 2010/11) in accordance with their pro rata share of all water purchased by all suburban purchasers likewise receiving or subject to the credit or surcharge from the City during the last fiscal year of the Term (i.e., FY 2008/09). No suburban purchaser which is not purchasing water from the City during the year in which the credit or surcharge shall be subtracted from or added to the water bills (i.e., FY 2010/11) shall be entitled or subject to any portion of the credit or surcharge.

If this Agreement is extended beyond its present Term, or if the City and some or all of the suburban purchasers enter into a new contract, the parties to the extended Agreement or new contract may postpone their pro rata portion of the refund or surcharge described in this subsection until the end of the term of the extended Agreement or new contract.

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ARTICLE VI

ACCOUNTING PROCEDURES; COMPLIANCE AUDIT

Section 6.01. *City Accounting Practices.*

(a) *General Rule.* The City will maintain the accounting records of the SFPUC, the SFWD and the HHWPD in a format and level of detail sufficient to allow it to determine the annual suburban revenue requirement and to allow its determination of the suburban revenue requirement to be audited as provided in this Article.

(b) *SFWD.* The City will continue to maintain the accounting records of the SFWD in accordance with the Uniform System of Accounts for Class A Water Utilities as adopted and prescribed by the CPUC from time to time, insofar as it is applicable to publicly owned and operated utilities. In addition, the SFWD will maintain an account structure which segregates SFWD operating and maintenance expenses (and any administrative and general expenses as to which the location in which they are incurred is relevant) and utility plant by geographic location into in-City and wholesale categories.

(c) *HHWPD.* The City will continue to maintain the accounting records of the HHWPD in accordance with the Uniform System of Accounts for Class A Electric Utilities as adopted and prescribed by the CPUC from time to time, insofar as it is applicable to publicly owned and operated utilities. In addition, the HHWPD will maintain an account structure which segregates HHWPD expenses and utility plant into water-specific, power-specific and joint categories.

(d) *Utility Plant Ledgers.* Both the SFWD and the HHWPD will maintain a subsidiary utility plant ledger that contains unique identification numbers for all assets added to the rate base after June 30, 1983 and identifies the original cost, accumulated depreciation, and annual depreciation expense for each asset so capitalized.

(e) *Supporting Documentation.* The SFWD, the HHWPD and the SFPUC, as appropriate, will maintain documentation identifying and supporting

(1) the division of the SFPUC charge into "Class A" and "Class B" categories, as defined in Section 4.08(a)(1)(B);

(2) the portion of total interest expense related to each series of each bond issue;

(3) the portion of total bonded debt outstanding related to each series of each bond issue;

(4) the use of the proceeds of each bond issue in sufficient detail to permit the calculation of the SFWD and HHWPD debt/equity ratios, and the average outstanding balance and cost of SFWD wholesale debt and HHWPD water-related debt.

(f) *Accounting Principles.* The City shall record transactions of the SFPUC, SFWD and HHWPD in conformity with applicable generally accepted accounting principles, as amended from time to time, except if those principles are inconsistent with an explicit provision of this Agreement.

(g) *Changes in Accounts or Accounting Practices.* Subject to the foregoing provisions of this Section, the City, the SFPUC, the SFWD or the HHWPD may change their accounting systems, charts of accounts or account to which individual expenses are posted, provided that the allocation of any expense to the suburban purchasers pursuant to the methodology set forth in this Agreement shall not be changed in whole or in part merely because of a change in: (1) the account to which such expense is posted; (2) the accounting system or chart of accounts used by the City, the SFPUC, the SFWD or the HHWPD; or (3) the organizational structure of the SFPUC, SFWD or HHWPD. The SFPUC, SFWD, and HHWPD will make available to the Auditor appointed pursuant to Section 6.03 a copy of their charts of accounts for the beginning of the fiscal year in question and a copy of their charts of accounts for the end of the fiscal year so that the Auditor can identify all changes in the account structure. At the time the interim suburban revenue requirement is delivered to the Auditor, the City also will notify the Auditor in writing of any changes made during the fiscal year

in the City's policies for assigning assets and expenses to particular SFPUC, SFWD or HHWPD accounts, including changes in the allocational bases for assigning SFPUC costs to the SFWD and HHWPD. A copy of this notice will be sent to the Suburban Representatives.

(h) *Unavailability of Financial Data.* The parties recognize that financial data required for the calculation of the final suburban revenue requirement occasionally may be unavailable. In that event, the City shall substitute an estimate for the data which are unavailable.

The estimate shall: (1) be reasonable; (2) result in a fair allocation of the costs affected by the estimate; and (3) be derived through the use of a suitable estimating technique. Estimating techniques employed shall be consistently applied to comparable instances of unavailable data.

In any case in which estimated, rather than actual, data are used to calculate the final suburban revenue requirement, the City shall notify the Suburban Representatives thereof at the time the final suburban revenue requirement is furnished to the Auditor. The notice shall contain: (1) a description of the unavailable data and the estimate used in place thereof; (2) an explanation of the cause of the data's unavailability; (3) the assumptions underlying the City's estimate; and (4) a statement of whether the event which caused the unavailability is capable of being avoided in the future and, if so, how.

In addition, if, while preparing the interim suburban revenue requirement, the City discovers that data are likely to be unavailable and that an estimate will likely be required to prepare the final suburban revenue requirement, it shall notify the Suburban Representatives and the Auditor as soon as possible thereafter.

The City shall, upon request, meet with the Suburban Representatives to discuss the unavailability of data and the City's estimate therefor. The parties may agree to engage an independent accountant or consultant (other than the Auditor or the Suburban Auditor) to recommend a mutually acceptable estimate for the unavailable data.

If actual data for which an estimate is used become available within eighteen months after the receipt (as defined in Section 8.02) of the Auditor's Report for the fiscal year in which the estimated data were used in calculating the final suburban revenue requirement, then the difference between the suburban revenue requirement calculated using the estimated data and that calculated using the actual data shall be determined. If that difference is greater than one-half of 1 percent of the final suburban revenue requirement for the fiscal year in which estimated data were used, then the difference shall be taken into account as an adjustment to the suburban revenue requirement for the year in which the data become available.

In order to minimize the likelihood that necessary financial data will be unavailable, the City will maintain two sets of data which are stored in either microfiche form or in some form of electronic storage (e.g., on magnetic tape), one set of which will be kept in the vault at 425 Mason Street, or at some other secure location. Data for a given fiscal year shall be maintained for at least three years from the fiscal year's close.

This Section is not applicable to Exhibit J, Section D of which defines the procedures governing the unavailability of water use data necessary to perform the calculations set forth therein.

Section 6.02. *Calculation of Suburban Revenue Requirement.*

Within three months after the close of each fiscal year (commencing with fiscal year 1984/85) the City will prepare a document, substantially in the form of Exhibit I, showing the calculation of an interim suburban revenue requirement for the preceding fiscal year based upon recorded expenses and recorded water usage.

The interim suburban revenue requirement may be revised by the City during the course of the compliance audit described in Section 6.04 and shall be revised to reflect any changes in recorded expenses required as a result of the audit of the SFWD and HHWPD conducted pursuant to the

City Charter and any corrections in the recorded water usage data to reflect actual usage. At the close of the audit, the City shall prepare a document, substantially in the form of Exhibit I, showing the calculation of a final suburban revenue requirement, which shall be submitted to the Auditor as the basis for its report in accordance with Section 6.05.

The City will furnish these calculations of the interim and final suburban revenue requirements to the Suburban Representatives, and shall make available to the Suburban Representatives, upon their request, supporting documentation which contains the data, identification of the sources of the data, and calculations made by the City in deriving the interim and final suburban revenue requirements. Upon request, the City will provide the Suburban Representatives with an explanation of the calculation of the interim suburban revenue requirement. The Suburban Representatives shall be given access to and shall be permitted to copy, at their own expense, all data and worksheets relevant to the calculation of the interim and final suburban revenue requirements.

Section 6.03. *Appointment of Independent Auditor.*

(a) *Purpose.* The purpose of this section is to provide for an annual audit by an independent certified public accountant of the procedures followed and the underlying data used by the City in calculating the interim and final suburban revenue requirements for the preceding fiscal year, to determine whether the interim and final suburban revenue requirements have been calculated in accordance with the terms of this Agreement and whether amounts paid by the suburban purchasers in excess of or less than the final suburban revenue requirement have been posted to the balancing account, together with interest as provided in Section 5.07(a).

(b) *Method of Appointment.* The City's Controller shall select an independent certified public accountant ("the Auditor") to conduct the compliance audit described below. Subject to approval by the Controller and the General Manager of the SFWD, the Auditor shall have the authority to hire such consultants as it deems necessary or appropriate to assist in the audit. The Auditor may be the same independent certified public accountant as is hired by the Controller to audit the books and records of the SFWD and/or the HHWPD.

The costs of the compliance audit shall be segregated from the cost of other auditing work, if any, performed by the Auditor for the City and allocated one-half to the City and one-half to the suburban purchasers. The terms of this Article shall be incorporated into the contract between the City and the Auditor, and the suburban purchasers shall be deemed to be third-party beneficiaries of said contract. The City shall use its best efforts to see to it that the Auditor complies with the provisions of Sections 6.04 and 6.05, but shall not be liable to the suburban purchasers for any failure by the Auditor to comply with the said sections or to conduct the audit in compliance with generally accepted accounting standards.

Section 6.04. *Conduct of Compliance Audit.*

(a) *Standards.* The Auditor shall perform the compliance audit in accordance with Generally Accepted Auditing Standards. In particular, its review shall be governed by the standards contained in Section AU 621.09 through AU 621.13 (Reports on Specified Elements, Accounts or Items of a Financial Statement) of the AICPA, *Professional Standards*, as amended from time to time.

(b) *Preliminary Meeting; Periodic Status Reports; Access to Data.* Prior to commencing the audit, the Auditor shall meet with the City and the Suburban Representatives to discuss the scope of work, the procedures to be employed and the schedule to be followed. No change in the level of precision, confidence level or audit procedures defined in Section 6.04(c), however, may be made without the consent of both the City and the Suburban Representatives. During the course of the audit, the Auditor shall keep the City and Suburban Representatives informed of any unforeseen problems or circumstances which could cause a delay in the audit or a significant expansion of the audit's scope. The Auditor shall be given full access to all records of the SFWD, HHWPD and other City departments that the Auditor deems necessary for the audit.

(c) *Level of Precision and Audit Procedures.* The Auditor shall perform the audit based on a precision level of ±1 percent of the City's computation of the suburban revenue requirement for the fiscal year under audit, using a confidence level of 99 percent, for the compliance audits covering fiscal years 1984/85 through 1986/87 and a precision level of ± one-half of 1 percent (with the same confidence level) thereafter. The Auditor shall review the City's calculation of the interim and final suburban revenue requirements and the underlying data in order to carry out the purpose of the audit described in Section 6.03(a) and to issue the report prescribed by Section 6.05. At a minimum the Auditor shall perform the following procedures:

(1) *SFWD Operating and Maintenance Expenses.* The Auditor shall review the SFWD cost ledgers to determine whether the recorded operating and maintenance expenses fairly reflect the costs incurred, reasonably reflect the geographic location at which the costs were incurred and are recorded on a basis consistent with applicable generally accepted accounting principles, as amended from time to time. The Auditor also shall determine whether the amount of operating and maintenance expenses incurred in the wholesale division or allocated as outside-City expenses pursuant to this Agreement were allocated to the suburban purchasers in accordance with the methodology set forth in this Agreement.

(2) *Administrative and General Expenses.* The Auditor shall review the SFWD cost ledgers and other appropriate financial documents, including those of the SFPUC, to determine whether the recorded administrative and general expenses fairly reflect the costs incurred by or allocated to the SFWD and whether they are recorded on a basis consistent with applicable generally accepted accounting principles, as amended from time to time.

The Auditor also shall determine (a) whether the City overhead expenses and SFPUC charges were allocated to the SFWD in accordance with this Agreement and (b) whether the amount of administrative and general expenses allocated to the suburban purchasers was determined as provided by this Agreement.

(3) *Property Taxes.* The Auditor shall review the SFWD cost ledgers to determine whether the amount of property taxes recorded therein fairly reflects the property tax expense incurred by the City on behalf of SFWD property and whether there has been deducted from the amount to be allocated all taxes actually reimbursed to the City by tenants of SFWD property under leases that require such reimbursement.

The Auditor also shall determine whether the amount of property taxes to be allocated to the suburban purchasers was based on the methodology set forth in this Agreement.

(4) *Return on Rate Base.* The Auditor shall review such supporting documentation and utility plant ledgers as it deems necessary to determine whether: (1) changes in the rate base have been fairly reflected; (2) the cost of each asset has been assigned in accordance with Section 4.06 and/or Exhibit B of this Agreement; and (3) the debt percentage, the equity percentage, the return on debt, the return on equity, the overall rate of return and the suburban purchasers' share of return on rate base have been calculated in accordance with the methodology set forth in this Agreement.

(5) *Depreciation.* The Auditor shall review such supporting documentation and utility plant ledgers as it deems necessary to determine whether the total SFWD depreciation expense and the depreciation expense allocated to suburban purchasers were calculated in accordance with the methodology set forth in this Agreement.

(6) *Suburban Hetch Hetchy Assessment.* The Auditor shall determine whether the SFWD calculated the Suburban Hetch Hetchy Assessment in accordance with the principles set forth in this Agreement.

(A) *Operating and Maintenance Expenses, Administrative and General Expenses, Property Taxes.* The Auditor shall review the cost ledgers of the HHWPD and other appropriate

financial documents, including those of the SFPUC, to determine whether the expenses recorded fairly reflect the expenses incurred by or allocated to the HHWPD; whether expenses have been allocated among water-specific, joint, and power-specific categories in accordance with the methodology set forth in this Agreement; whether joint expenses have been reallocated to water and power in accordance with the methodology set forth in this Agreement; and whether water-related HHWPD expenses have been allocated to the suburban purchasers in accordance with the principles set forth herein.

(B) *Return on Rate Base.* The Auditor shall review such supporting documentation and utility plant ledgers as it deems necessary to determine whether (1) changes in the rate base have been fairly reflected, (2) the cost of each asset has been assigned in accordance with Section 4.08(a)(4)(i) and/or Exhibit H of this Agreement; and (3) the debt percentage, the equity percentage, the return on equity, the overall rate of return and the suburban purchasers' share of return on rate base have been calculated in accordance with the methodology set forth in this Agreement.

(C) *Depreciation.* The Auditor shall review such supporting documentation and utility plant ledgers as it deems necessary to determine whether the total HHWPD water related depreciation expense and the depreciation expense allocated to suburban purchasers were calculated in accordance with the methodology set forth in this Agreement.

(7) *Review of Contract Administration Costs.* The Auditor shall perform (1) a review of the supporting documentation used to determine the CPI adjustments provided for in Section 4.04 and (2) a review of the expenses charged to Account No. 6-49024 (Implementation and Administration of Suburban Settlement Agreement) to determine if these expenses were connected to the implementation or administration of this Agreement, taking into account the provisions of Section 4.04(c).

(8) *Review of Water Usage Rate Calculations.* The Auditor shall verify the mathematical accuracy of the calculations used by the City to derive the water usage rates defined in Exhibit J.

(d) *Use of and Reliance on Audited Financial Statements and Water Use Data.*

(1) In performing the audit, the Auditor shall incorporate any adjustments to the cost ledgers recommended by the independent accountant who has audited the financial statements of the SFPUC, SFWD and HHWPD as required by the Charter of the City. The Auditor may rely upon the work performed by that independent auditor if the Auditor reviews the work and is willing to take responsibility for it as part of the Auditor's audit.

(2) In performing the audit and issuing its report, the Auditor may rely on water use data furnished it by the SFWD, regardless of whether the suburban purchasers contest the accuracy of such data. The Auditor shall have no obligation to independently verify the accuracy of the water use data provided to it by the City; however, the Auditor shall disclose in its report any information in its possession which indicates that the water use data provided it by the City are inaccurate in any significant respect. Any error which would affect the City's calculation of the final surburban revenue requirement by one-half of 1 percent or more shall be deemed significant.

Section 6.05. *Issuance of Auditor's Report.*

The City will require the Auditor to issue its report no later than six months after the close of the fiscal year under audit.

The Auditor's report shall be addressed and delivered to the City and the Suburban Representatives and shall contain the following:

(1) An indentification of the material audited.

(2) A statement that the examination was made in accordance with generally accepted auditing standards.

(3) A description of the scope of the Auditor's work.

(4) An identification and description of the basis on which the material audited was prepared and of any variations between the basis on which it was prepared and the basis on which it should have been prepared.

(5) A description of any significant interpretations or assumptions regarding this Agreement made by the City in calculating the final suburban revenue requirement or by the Auditor in performing the audit.

(6) A statement whether or not in the Auditor's opinion (subject to the provisions of Section 6.04(d)(2)) the final suburban revenue requirement is fairly stated and has been calculated by the City in accordance with this Agreement and whether the amount posted by the City to the balancing account as a credit or charge to the suburban purchasers properly reflects the difference between the actual amounts paid by the suburban purchasers and the final suburban revenue requirement together with interest as provided for in Section 5.07(a). The Auditor shall also calculate the cumulative balance in the balancing account, after giving effect to the amount posted for the fiscal year under audit.

(7) A description of any significant changes in the City's accounting practices from the preceding year. Any change which would affect the City's calculation of the final suburban revenue requirement by one-half of 1 percent or more will be deemed significant.

(8) A statement whether or not, in the Auditor's opinion, the final suburban revenue requirement (for years after FY 1984/85) was prepared on a basis consistent with the preceding year.

(9) A statement whether, if the City has used estimated data in calculating the final suburban revenue requirement, the estimate was made in accordance with the requirements of Section 6.01(h).

Section 6.06. *Suburban Review.*

If the Suburban Representatives are not satisfied with the compliance audit conducted by the Auditor, the suburban purchasers shall have the right, at their own expense, to designate an auditor of their own ("the Suburban Auditor") to conduct a review ("the Suburban Review") of the Auditor's Report. The suburban purchasers shall reimburse the City for half of any overtime wages and related expenses paid by the City to its employees for time spent assisting or cooperating with the Suburban Auditor in connection with the suburban review.

The scope of the suburban review shall be limited to those portions of the Auditor's compliance report as are designated by the Suburban Representatives in a letter submitted by them or on their behalf to the General Manager of the SFWD, with copies to the Controller, the General Manager of the HHWPD, and the Auditor, within three months after receipt by the Suburban Representatives of the Auditor's compliance report. This designation shall be complete upon the receipt of said letter by the General Manager of the SFWD within the time indicated. If the Suburban Representatives designate only a portion of the Auditor's compliance report for review by the Suburban Auditor, and the Suburban Auditor's review of that portion causes the Suburban Auditor to believe that other portions of the Auditor's compliance report should be reviewed as well, the Suburban Representatives shall promptly designate such additional portions for further review by the Suburban Auditor by serving notice of such designation upon the General Manager of the SFWD and the Auditor. The Suburban Auditor shall have the right to review those portions of the City's records and the Auditor's working papers that are pertinent to the portions of the Auditor's compliance report that have been designated in accordance with this paragraph.

At the conclusion of the Suburban Auditor's review, representatives of the City and the Suburban Representatives shall meet to discuss any differences between them concerning the City's compliance with this Agreement during the previous year or the calculation of the previous year's final suburban revenue requirement. If such differences cannot be amicably resolved, the dispute shall be submitted to arbitration in accordance with Section 8.02 of this Agreement.

ARTICLE VII

WATER SUPPLY

Section 7.01. *Supply Assurance.*

The City agrees to supply water to the suburban purchasers as required, subject to a maximum annual average metered supply of water ("the Supply Assurance") equal to 184 million gallons per day (mgd), unless said amount is modified pursuant to the provisions of Section 2.01(d). This Supply Assurance shall be for the benefit of the suburban purchasers only, and no water sold by the City to any other person or entity (including, without limitation, any City departments or other entities associated with the City, wherever located, or any other water customer of City) shall be included within the Supply Assurance.

Notwithstanding the Supply Assurance established by this Section and the individual supply guarantees established by the presently-existing or recently-expired contracts between the City and the suburban purchasers and Section 7.02, the amount of water made available by the City to the suburban purchasers is subject to reductions, in accordance with Section 7.03, made necessary by reason of water shortage, drought, earthquakes, other acts of God, or rehabilitation or malfunctioning of the City's water delivery system, to the extent that and for the period that such events or circumstances prevent the City from fulfilling the Supply Assurance (including the individual guarantees) and the needs of the direct City water users. In the event of such a reduction, the City will restore its ability to fulfill the Supply Assurance (including the individual guarantees) and to meet the needs of direct City water users as soon as is reasonably practical.

The City agrees to use its best efforts to keep the SFWD and HHWPD water delivery system in good working order and repair. The City further agrees not to sell water to any resale or non-resale purchaser which is located outside the City's geographical limits and which was not purchasing water from the City on June 30, 1983, deliveries to which, either individually or in the aggregate, would impair the City's ability to fulfill the Supply Assurance. Tenants, lessees, and purchasers (and their successors in interest) of City property and City departments and agencies shall not be considered new purchasers within the meaning of this paragraph.

The Supply Assurance shall survive the termination of this Agreement and the Individual Contracts entered into pursuant hereto.

The parties acknowledge that the Supply Assurance is expressed in terms of daily deliveries on an annual average basis and does not itself constitute a guarantee by the City to meet peak daily or hourly demands of the suburban purchasers at the time their annual usage equals the Supply Assurance, irrespective of what those peak demands may be. The parties acknowledge, however, that the existing system has been designed and constructed to meet peak daily and hourly demands and that its capacity to do so has not yet been reached. The City agrees to operate the existing system to meet peak requirements of the suburban purchasers to the extent possible without adversely affecting its ability to meet peak demands of in-City customers. This Agreement is not intended to preclude the City from undertaking to meet specific peak demand requirements of individual suburban purchasers in the Individual Contracts.

Section 7.02. *Allocation of Supply Assurance.*

(a) The parties recognize that all the suburban purchasers have presently existing or recently-expired water supply contracts with the City and that certain, although not all, of these contracts contain provisions requiring the City to continue to supply the particular suburban purchaser with a specified amount of water after the expiration thereof unless and until a new contract between the City and the suburban purchaser is signed. The parties further recognize that two of these contracts (those between the City and the Alameda County Water District and between the City and the Dimond Public Utility District) contain supply guarantee provisions which fix the amount

of water guaranteed by the City by reference to water used during a calendar year (1984) not completed until after the effective date of this Agreement. Finally, the parties recognize that the contract between the City and the Estero Municipal Improvement District ("Estero") contains a supply guarantee provision which fixes the amount of water to be guaranteed by the City by reference to a year (2011) beyond the Term of this Agreement and that the contract between the City and the City of Hayward ("Hayward") does not contain an expiration date.

The intention of the parties to this Agreement is to preserve the entitlement of each suburban purchaser to the amount of water which it is or will be guaranteed by its presently existing or recently expired contract, that such guarantees shall continue to exist subsequent to the signing of this Agreement and the Individual Contracts, and that such guarantees (as they may be enlarged pursuant to Section 7.02(b)(3)) shall survive the expiration of this Agreement and the Individual Contracts.

Exhibit K-1, attached hereto, is a list which identifies the suburban purchasers (except Estero and Hayward) which shall be entitled to a specified quantity of water pursuant to this Section, by virtue of their existing contracts or this Agreement, and the quantity of water presently guaranteed to each. (The quantities set forth in Exhibit K-1 shall fix the present supply guarantee to each listed entity which becomes a party to this Agreement. However, neither those quantities nor the quantities set forth in Exhibit K-2 shall fix the present supply guarantee of any listed entity which does not become a party to this Agreement. The City and any such entity shall be free to use any relevant data (not including Exhibits K-1 and K-2) in determining the quantity of water to which such entity may be entitled under its existing or expired contract with the City.)

(b) The water entitlements guaranteed by the presently existing or recently expired contracts shall be included in the Supply Assurance. The Supply Assurance shall be allocated in the following manner:

First, the water used by Estero and Hayward shall, if each is a party to this Agreement, be subtracted from the Supply Assurance; the remainder shall be called the "suburban allocable water." (If Estero and/or Hayward is not a party to this Agreement, the Supply Assurance itself shall be periodically reduced as provided in Section 2.01(d); and the usage of whichever entity is not a party will not be subtracted from the Supply Assurance as so reduced.)

Second, the total amount of water presently set forth in Exhibit K-1 (127.55 mgd, subject to adjustment based on actual 1984 usage by Alameda County Water District and in the Dimond Public Utility District service area as described in Exhibit K-1) shall be subtracted from either (1) the suburban allocable water as defined by the preceding paragraph or (2) the Supply Assurance as adjusted in accordance with Section 2.01(d), whichever is applicable; the remainder produced by this subtraction shall be deemed "residual water". The residual water shall then be allocated as follows:

(1) If the suburban purchasers (other than Estero and Hayward) duly approve an allocation of some or all of the residual water, either unanimously or pursuant to a decision-making process previously ratified by the suburban purchasers, the City shall, upon reasonable notice of any such allocation, make reasonable efforts to apportion the residual water among the suburban purchasers in conformity therewith. The suburban purchasers shall notify the City of any allocation so approved by June 30 of each year, to be effective during the following fiscal year.

(2) If the suburban purchasers (other than Estero and Hayward) fail to notify the City by June 30, the City shall be entitled to assume that they have failed to approve an allocation (or further allocation) of residual water for the ensuing fiscal year. In any year as to which no allocation approved by suburban purchasers is in effect, the City shall deliver unallocated residual water to each individual suburban purchaser as it requires, (subject to the Supply Assurance) in accordance with its needs and then-existing service area. In delivering water to a suburban purchaser in accordance with this subsection, the City will incur no liability of any kind or character to any other suburban purchaser.

(3) If for three consecutive years the suburban purchasers fail to approve an allocation of some or all of the residual water, then the supply guarantees set forth in Exhibit K-1 will be deemed to be enlarged to the average amount of water used annually by each suburban purchaser during the three-year period (i.e., the sum of the usage in each year divided by 3). Each consecutive three-year period will be considered separately; the first such period will commence July 1, 1984 and end on June 30, 1987. In no event will the individual supply guarantees be reduced below the quantities presently set forth in Exhibit K-1.

(4) If both Estero and Hayward are parties to this Agreement and if the average use by suburban purchasers other than Estero and Hayward for one of the three-year periods defined in subsection (3), *supra*, exceeds the suburban allocable water, the enlarged individual supply guarantees of suburban purchasers other than Estero and Hayward will be reduced pro rata so that the total individual supply guarantees, as increased pursuant to subsection (3), *supra*, do not exceed the suburban allocable water. The pro rata reductions will be in accordance with the procedure set forth in Exhibit K-3.

If neither Estero nor Hayward is a party to this Agreement and if the average use by suburban purchasers for one of the three-year periods defined in subsection (3), *supra*, exceeds the Supply Assurance, as adjusted in accordance with Section 2.01(d), then the enlarged individual supply guarantees of suburban purchasers will be reduced pro rata so that the total individual supply guarantees, as increased pursuant to subsection (3), *supra*, do not exceed the adjusted Supply Assurance. The pro rata reductions will be in accordance with the procedure set forth in Exhibit K-3.

If either Estero or Hayward, but not both, is a party to this Agreement, the procedure described in this subsection 7.02(b) will apply *mutatis mutandis*.

The provisions of this subsection (4) are not in derogation of the reservation of claims to water in excess of the Supply Assurance contained in Section 7.04. Nor do they constitute an acknowledgment by suburban purchasers other than Estero and Hayward that the City is obligated or entitled to reduce their individual supply guarantees in the circumstance described herein. The provisions of this subsection (4) shall, however, govern the "vesting" procedure described in subsection (3), *supra*, unless and until a court determines that such provisions violate rights of the suburban purchasers derived independently of this Agreement. This paragraph is not intended to and shall not constitute a contractual commitment on the part of the City to furnish more than the Supply Assurance to the suburban purchasers or a concession by the City that the provisions of this subsection violate any rights of the suburban purchasers.

(5) At such time as the aggregate water usage of the suburban purchasers during a fiscal year is within 4 mgd of the Supply Assurance, the calculations described in subsections (3) and (4) shall be made as of the end of that fiscal year, and each year thereafter, rather than triennially and on an annual, rather than a three-year average, basis.

(c) It shall be the responsibility of each suburban purchaser to limit its water purchases from the City so as to comply with any allocation of the residual water made pursuant to this Section, regardless of whether such allocation has been approved by all the suburban purchasers (other than Estero and Hayward) pursuant to subsection (b)(1), established in accordance with subsection (b)(2), or derived through the procedure set forth in subsection (b)(3). The City shall in no event either be liable to any suburban purchaser or be obligated to supply more water to any suburban purchaser individually or to the suburban purchasers collectively than the amount otherwise allocated to it or them under this Agreement due to the use by any suburban purchaser of more water than the suburban purchaser is entitled to under this Agreement.

(d) The City shall install such new connections between the SFWD water system and that of any suburban purchaser that are necessary to deliver the quantities of water to which the suburban

purchaser is entitled under this Agreement. The City shall have the right to determine the location of such connections, in light of the need to maintain the structural integrity of the SFWD system and, where applicable, the need to limit peaking directly off the SFWD pipelines by individual suburban retail users of water, the need to ensure that suburban retail users of water have access to sufficient storage capacities in the appropriate suburban water system, the need to ensure that the suburban retail users of water have access to alternate sources of water in the event of a reduction in the City's ability to provide them with water, and other similar factors which may affect the desirability or undesirability of a particular location. The City's decisions regarding the location of new connections and the location, size and type of any new meters shall not be reviewable except for abuse of discretion or failure to provide the suburban purchasers with connections and meters adequate to deliver the quantities of water to which they are entitled under this Agreement.

Section 7.03. *Shortages.*

(a) Within six months after the effective date of this Agreement, the City and the suburban purchasers (who may act through the Suburban Representatives or other delegates) shall begin good faith negotiations to develop a "water conservation plan," which shall prescribe the steps which the City and the suburban purchasers shall take to encourage and require water conservation and to develop alternative sources of water in the event of a drought or other water shortage. The City and the suburban purchasers may agree to fund such studies as may be necessary to assist in the development of such plan, the expenses of which shall be borne one-half by the City and one-half by the suburban purchasers. The purpose of the negotiations shall be to arrive at a water conservation plan which allocates water between the City and the suburban purchasers and their retail customers in time of shortage. If a water conservation plan is adopted and approved by the City and by each of the suburban purchasers, the plan will supercede this provision and the provisions of subsection 7.03(b). The plan described in this subsection is not intended to be the urban water management plan required to be adopted by urban water suppliers under Sections 10610 *et seq.* of the Water Code unless all parties hereto subsequently agree as a part of the negotiations described herein.

(b) In the event that at any time during the Term of this Agreement there is not available in the SFWD and HHWPD water system sufficient water to supply the requirements of the suburban purchasers and the direct City water users, each suburban purchaser shall receive no more than that quantity of water which bears the same ratio to the total quantity of water then available in the City's water system, as the amount delivered to the suburban purchaser in the last preceding calendar year prior to the condition of shortage bears to the total amount delivered to all users supplied by the system during that calendar year.

(c) Nothing in this Agreement, including subsection (b), *supra*, shall be understood or construed as a concession by the City that it is required to allocate water between the suburban purchasers and the direct City water users during a water shortage on a pro rata basis, nor shall anything in this Agreement, including subsection (b), *supra*, waive or compromise the City's specifically-reserved claims that: (1) it is not required to allocate water between the suburban purchasers and the direct City water users in time of water shortage on a pro rata basis; (2) water used by the suburban purchasers in excess of the Supply Assurance may be disregarded in allocating water during times of water shortage; and (3) allocational methods other than pro rata reductions would allocate water between the suburban purchasers and the direct City water users during a water shortage more fairly and equitably than would pro rata reductions. Nothing in this Agreement, including subsection (b), *supra*, shall waive or compromise the suburban purchasers' denial of these claims or their specifically-reserved claim that the City has an obligation, derived independently from this Agreement, to allocate water between the suburban purchasers and the direct City water users in times of water shortage on a pro rata basis. In the event that an allocation of water is required at a time when the City and each suburban purchaser have not agreed on a water conservation plan pursuant to subsection (a), *supra*, the City shall allocate the available water

in the first instance and the suburban purchasers shall be free to challenge the allocation on any applicable legal or equitable basis.

(d) *Localized Water Reductions.* Notwithstanding the foregoing provisions of this Article, the City may reduce the amount of water available in or interrupt water deliveries to specific geographical areas within the SFWD's total service area to the extent that such reductions are necessary due to system emergencies, or in order to install, repair, rehabilitate, replace, investigate or inspect equipment in, or perform other maintenance work on, the SFWD and HHWPD water system. Such reductions or interruptions may be imposed by the City without corresponding reductions or interruptions in the amount of water available to SFWD water users outside the specific geographical area where reductions or interruptions are necessary, if the system's ability to supply water outside the specific geographical area has not been impaired. In the event of such a reduction or interruption, the City will restore the supply of water to the specific geographical area as soon as is reasonably practical. Except in cases of emergencies (during which oral notice shall be sufficient), the City will give the affected suburban purchaser(s) reasonable written notice of such localized reductions or interruptions, the reasons therefor, and the probable duration thereof. When the reduction or interruption is attributable to the scheduled installation, repair, rehabilitation, replacement, investigation or inspection of water delivery facilities, the City will use reasonable efforts to limit any such reduction or interruption in the delivery of water to the months of November through April.

Section 7.04. *Reservation of Claims to Additional Water; Service Area Expansion.*

(a) Nothing in this Agreement (including the Supply Assurance contained in Section 7.01 and the shortage allocation provisions contained in Section 7.03) is intended to or shall be construed to waive or compromise the potential or actual claim by any or all of the suburban purchasers that the City is obligated under federal or state law to supply it or them with water in addition to that guaranteed by Section 7.01 and allocated by Section 7.02 and/or to expand the City's existing water delivery system in order to furnish such additional water; nor shall anything in this Agreement (including Section 7.01) be construed to compromise or waive the City's denial of these claims.

(b) The suburban purchasers recognize that each Individual Contract does or will contain, as an exhibit, a map of their respective service areas. Any suburban purchaser which wishes to expand its service area shall notify the City, request the City's consent to the expansion, and provide information reasonably requested by the City regarding present and projected water demand within the area proposed to be added to the suburban purchaser's service area.

The foregoing provision is not intended to and shall not be construed to waive or compromise the potential or actual claim of any suburban purchaser (other than San Jose and Santa Clara whose service areas are fixed pursuant to Section 9.03) that the City is obligated under federal or state law to furnish water, included within the Supply Assurance, to them for delivery to customers outside their presently existing service areas and that they are entitled to enlarge their service areas to supply those customers with such water.

In order to assert any claims reserved by this subsection, however, a suburban purchaser must first have complied with the first paragraph hereof and its request must have either been refused by the City or not acted upon for six months after its submission to the City.

This section will not prevent the City and any suburban purchaser (other than San Jose and Santa Clara) from (1) agreeing in their Individual Contract or any amendment thereto that the suburban purchaser may expand its service area without subsequent City approval to a definite size but no larger and (2) waiving the provisions of this section with respect to any additional expansion. Nor shall this section prevent any suburban purchaser from (1) agreeing with the City in its Individual Contract or any amendments thereto that it will not expand its service area beyond

its present limits without City approval and (2) waiving the provisions of this section with respect to any additional expansion.

Section 7.05. *Restrictions on Resale.*

Each suburban purchaser agrees not to sell any water purchased from the City to any private party for resale by such private party to others, and further agrees not to sell any water from any source whatsoever to any private party for resale to others by substituting therefor water purchased from the City, without the City's prior written approval.

Each suburban purchaser also agrees that no water furnished by the City to it shall be delivered by it outside the service area described in an exhibit to its Individual Contract, and further agrees not to deliver any water outside the boundary of its service area by substituting therefor water purchased from the City, unless permitted by stipulation between the City and the suburban purchaser, or unless written consent for such delivery is entered into by the City and the suburban purchaser. The preceding sentence shall not apply to sales of water to another suburban purchaser on a temporary basis if the purchases of such water are authorized as emergency purchases under Section 7.07(a).

The City acknowledges that it has heretofore consented in writing to deliveries of water by individual suburban purchasers outside their service area boundaries and agrees that nothing in this Agreement is intended to affect such prior authorizations, which remain in full force and effect according to their terms. Such authorizations shall be identified in appropriate Individual Contracts. The City also agrees that it will not unreasonably withhold its consent to future requests by any suburban purchaser to deliver water to another suburban purchaser for resale.

Section 7.06. *Prohibition of Assignment.*

This Agreement is not for the benefit of any person, corporation, or other entity, other than the parties hereto, and no person, corporation or other entity except the parties hereto shall have rights or interests in or under this Agreement, except as expressly provided herein.

This Agreement shall be binding on, and shall inure to the benefit of, the parties to it and their respective successors and permitted assigns. Each suburban purchaser signing this Agreement agrees that it will not transfer or assign any rights or privileges under this Agreement, either in whole or in part, or make any transfer of all or any part of its water system or allow the use thereof in any manner whereby any provision of this Agreement will not continue to be binding on it, its assignee or transferee, or such user of the system. Any assignment or transfer in violation of this covenant, and any assignment or transfer that would result in the supply of water in violation of the Act, shall be void.

Nothing in this Section shall prevent any suburban purchaser (except the California Water Service Company, Cordilleras Mutual Water Association, and Stanford) from entering into a joint powers agreement or a municipal or multi-party water district with any other suburban purchaser (except those three listed above) to exercise the rights and obligations granted to and imposed upon the suburban purchasers hereunder, nor shall this Section prevent any suburban purchaser (except those three listed above) from succeeding to the rights and obligations of another suburban purchaser hereunder as long as the total service area served by the surburban purchasers involved in the succession is not thereby enlarged.

Section 7.07. *Prohibition of Water Purchases from Others; Use of Local Sources; Minimum Annual Purchases; Adjustment of Service Areas.*

(a) Each suburban purchaser, except for Alameda County Water District, and the Cities of Palo Alto, Sunnyvale, Mountain View, Milpitas, San Jose and Santa Clara, agrees that it will not, unless permitted by stipulation between it and the City, or unless given prior written approval of

such transaction by the City, contract for, purchase, or receive, with or without compensation either directly or indirectly, any water for delivery or use in each suburban purchaser's service area, from any person, corporation, or any entity whatsoever, whether public or private, including any governmental entity unless and until the suburban purchaser has demanded water from the City in accordance with the terms and conditions set forth herein and the City has refused to supply said additional water after due notice. In the event of such a request by any suburban purchaser and such a refusal by the City, the suburban purchaser(s) shall be free to purchase water from other entities, but only to the extent the City is unable and/or unwilling to supply the water needs of each such suburban purchaser. Nothing contained herein shall require any suburban purchaser to purchase water from the City over and above the water covered by the Supply Assurance, if the City is successful in its contention that the price for such additional water may legally include compensation to the City for decreased net power sale revenues resulting from the sale of such additional water. Nor shall anything contained herein prevent any suburban purchaser from purchasing water from sources other than the City, to the extent that such purchases are necessary to provide the suburban purchaser with water on an emergency and temporary basis. Each suburban purchaser who buys emergency water from any source other than the City shall give the City prompt notice of the nature of the emergency requiring such emergency purchases, the amount of water which is to be or has been purchased, and the duration of such purchases. The provisions of this subsection shall not apply to purchases of reclaimed wastewater in quantities up to twenty (20) percent of the amount of water which the suburban purchaser received from the City in calendar year 1981, as shown in Exhibit K-2. Purchases of reclaimed wastewater in any year in excess of that amount shall require approval by the City.

(b) The suburban purchasers shall use their best efforts to use all sources and supplies of water now owned or controlled by them, including all surface and ground water owned by the suburban purchasers within their respective service areas, to augment any supply demanded from the San Francisco Water Department, provided that water from such sources complies or can reasonably be made to comply with applicable state and federal drinking water quality standards or the water quality requirements of the suburban purchaser's commercial and industrial customers. Water which does not comply with applicable state and federal drinking water quality standards or meet the water quality requirements of commercial and industrial customers shall be used for other purposes by each suburban purchaser to the extent such use is economically and environmentally feasible. The suburban purchasers may acquire or develop wells, pumping plants or other sources of supply as necessary to supply water to their customers. (As used in the preceding sentence, "other sources of supply" does not include water purchased from suppliers other than the City.) The term "ground water" shall include all water available from aquifers within their respective service areas, whether such aquifers are recharged naturally or through artificial recharge facilities.

(c) Alameda County Water District and the Cities of Palo Alto, Sunnyvale, Mountain View, Milpitas, San Jose and Santa Clara shall be entitled to purchase water from sources other than the City; provided that the City may, in the case of San Jose and Santa Clara, and shall, in the case of each of the other entities, require that each purchase a minimum quantity of water from the City as a condition to this authorization. (If a suburban purchaser listed herein does not wish to have the right to purchase water from other sources without prior approval of the City, no minimum purchase requirements will be included in its Individual Contract.) These minimum required quantities will be contained in the Individual Contracts between the City and each suburban purchaser and will be expressed as minimum annual quantities which shall be no less than 80 percent and no more than 100 percent of the amount of water that particular suburban purchaser received from the City during calendar year 1981. Each of these Individual Contracts may also contain mutually acceptable monthly minimum and daily and hourly maximum water delivery levels; provided, however, that such maximum levels shall not be construed as allocations of residual water on an annual average basis and that, in the event of any conflict between the maximum daily and hourly levels and the

allocations of water provided for in Section 7.02 and 7.03 of this Agreement, the allocations shall control. Notwithstanding the preceding sentence, no water use which, taken on an annual basis, exceeds the amount obtained by multiplying the daily maximum by 365 shall vest for purposes of determining individual supply guarantees under the existing Individual Contracts or Section 7.02(b)(3).

The minimum purchase requirements in Individual Contracts will be waived during a drought or other period of water shortage if the water made available to the suburban purchaser is less than the minimum purchase quantity.

(d) If two or more suburban purchasers adjust the boundaries of their respective service areas so that one assumes an obligation to serve customers in an area that was previously within the service area of another suburban purchaser, they may also correspondingly adjust their Supply Guaranties as set out in Exhibit K-1 and the allocations of residual water under Section 7.02 between or among them.

Such adjustments shall require only the consent of the City and the suburban purchasers involved, so long as the Supply Assurance, the allocation of water to all other suburban purchasers, and the total service area of all suburban purchasers are not affected.

Any adjustment of service area boundaries that would result in the supply of water in violation of this Agreement or the Act shall be void.

ARTICLE VIII

OTHER AGREEMENTS OF THE PARTIES

Section 8.01. *Pricing of Additional Water.*

(a) The amounts to be paid by the suburban purchasers for water furnished to them within the Supply Assurance shall be governed by the rate-setting methodology described in Article IV. Should the City sell the suburban purchasers water in excess of the Supply Assurance, for whatever reason, pricing of that water ("additional water") will similarly be governed by the rate-setting methodology set forth in Article IV, subject to the City's explicitly reserved intention to add to such rates a surcharge that would reimburse the City for any decrease in the City's net power revenues which may directly or indirectly result from the sale of additional water to the suburban purchasers. As used in this Section, the term "net power revenues" means the revenues received by the City from the sale of electric power generated by facilities in the Hetch Hetchy system, less (1) the cost of generating the power and (2) the net revenues received by the City from the suburban purchasers for the additional water the sale of which allegedly gave rise to the decrease in power revenues. The suburban purchasers reserve the right to contest under any applicable provision of law both (1) the legality or propriety of any attempt by the City to include in the suburban revenue requirement a charge for decreased net power revenues allegedly resulting from the sale of additional water and (2) the amount of such decreased net power revenues, if any, in fact caused by the sale of additional water, and the methodology by which that amount is to be calculated. The suburban purchasers further reserve the right to contend that any surcharge which the City would otherwise be entitled to add to the rates charged for additional water pursuant to this Section may be partially or totally offset by a reduction in the rate paid for additional water if the City continues to contend that it has no obligation to provide such water to the suburban purchasers and such water is delivered to the suburban purchasers on an interruptible basis.

(b) Notwithstanding subsection (a), *supra,* no suburban purchaser shall contend that the rates charged for additional water should be less than those charged for water included within the Supply Assurance.

(c) With the exception of the issues explicitly reserved by subsection (a), no suburban purchaser shall contend, during the Term of this Agreement, that the suburban revenue requirements that result from the provision of such additional water as determined by this Section and Article IV violate any provision of federal law (including the Raker Act), state law, the Charter of the City and County of San Francisco, or any other provision of law. No resolution, judicial or otherwise, of any of the issues explicitly reserved by this Agreement (including the issues specifically reserved by this Section) shall affect in any way the suburban revenue requirements to be charged by the City for the provision of water covered by the Supply Assurance, as such suburban revenue requirements shall in all events be determined solely and exclusively by the rate-making methodology set forth in Article IV.

(d) The furnishing of additional water by the City to the suburban purchasers shall not be deemed or construed to be a waiver by the City of its claim that it has no obligation under any provision of law to supply such water to the suburban purchasers, nor shall it constitute a dedication by the City to the suburban purchasers of such additional water.

Section 8.02. *Arbitration and Judicial Review.*

(a) *Matters to be Arbitrated.* All questions or disputes arising under the following provisions of this Agreement shall be subject to mandatory, binding arbitration pursuant to the terms of this Section and shall not be subject to judicial determination:

(1) Section 3.04;

(2) All of Article IV;

(3) Sections 5.01, 5.06, and 5.07;

(4) All of Article VI;

(5) Section 8.03;

(6) Section 8.08 to the extent specified therein;

(7) Section 8.14(b); and

(8) Exhibits C, E and J.

All questions or disputes arising under Sections 5.02 and 5.03(a) shall be subject to either binding arbitration or judicial determination, as provided therein. Except as expressly provided to the contrary, all other questions or disputes arising under this Agreement (including, without limitation, those arising under Section 5.04) shall be subject to judicial determination.

(b) *Venue.* Any judicial action or proceeding arising under this Agreement shall be brought in the United States District Court for the Northern District of California or in the state courts of the State of California.

(1) If the action or proceeding ("action") is brought in state court, unless the parties to the action otherwise agree, the venue of such action shall be in the Superior Court in and for the County of Marin or any Municipal Court in the County of Marin, whichever court may have subject matter jurisdiction.

(2) If at the time the action is commenced in state court, or thereafter, the County of Marin or any public entity located therein is an actual or potential, direct or indirect, purchaser of water from the City, the following venue procedures shall apply instead of those set forth above in subparagraph (b)(1):

(A) If the action is one in which a jury is not of right, or trial by jury is waived, the action may be filed or maintained in the Superior Court or the Municipal Court for the County of Marin, but any party to the action may request the court to request the chairperson of the Judicial Council to assign a disinterested judge from a neutral county to hear the action and all proceedings in connection therewith pursuant to California Code of Civil Procedure Section 394(I).

(B) If the action is not one described in subparagraph (A), or if the chairperson of the Judicial Council does not assign a disinterested judge from a neutral county, then the action shall be commenced in, or if the action or proceeding has already been commenced in the Superior Court or any Municipal Court in the County of Marin it shall, on motion of any party, be transferred to, any court in the State of California, mutually agreed upon by the parties, having subject matter jurisdiction and located in any county other than Alameda, San Mateo, San Francisco, or Santa Clara counties. In the absence of such agreement, any such state court action or proceeding shall be commenced in or transferred on motion of any party to any court in the State of California having subject matter jurisdiction and located in any county other than Alameda, San Mateo, San Francisco, or Santa Clara counties.

(c) *Demand For Arbitration.* If any arbitrable question or dispute should arise, any suburban purchaser or the City may commence arbitration proceedings hereunder by service of a written Demand for Arbitration. All Demands shall set forth the issues to be arbitrated and the general contentions relating to those issues of the party serving the Demand. Within 45 days after service of a Demand upon it, any suburban purchaser or the City may serve a Notice of Election to become a party to the arbitration and a Response to the Demand, setting forth its position and general contentions with respect to the issues set forth in the demand. If a timely Notice of Election and Response is not filed by any such entity, it shall not be a party to the arbitration, but shall nonetheless be bound by the award of the arbitrator pursuant to Section 8.02(g)(10). If no party to this Agreement serves a timely Notice of Election and Response, the party seeking arbitration

shall be entitled to the relief sought in its Demand for Arbitration without the necessity of further proceedings.

If a Demand or Notice of Election is made by the City, it shall be served by personal delivery or certified mail to each suburban purchaser at the address of such purchaser as set forth in the billing records of the San Francisco Water Department at such time. If a Demand or Notice of Election is made by a suburban purchaser, service shall be by certified mail or personal delivery to the General Manager, San Francisco Water Department, 425 Mason Street, San Francisco, California 94102, and to each of the other suburban purchasers. If arbitration is commenced, the suburban purchasers shall use their best efforts to formulate a single, joint position with respect thereto. In any event, with respect to the appointment of arbitrators, as hereinafter provided, all suburban purchasers that take the same position as to the issues to be arbitrated shall jointly and collectively be deemed to be a single party.

(d) *Limitations Period.* All Demands For Arbitration shall be served within four years of the date on which the cause of action arose, provided that no amount posted to the balancing account by the City pursuant to Section 5.07 for any individual fiscal year shall be adjusted thereafter in any respect (except by agreement of the City and the Suburban Representatives) unless a Demand seeking such relief is served within eighteen months of receipt by the Suburban Representatives of the Auditor's Report for that year as provided in Section 6.05. (If the Suburban Representatives receive the Report on different days, then the date of receipt for purposes of this subsection shall be the date the Report is received by the Suburban Representative which purchased the largest quantity of water from the City during the fiscal year which the Report concerns.) If no such Demand is served within the eighteen month period specified above, the amount posted to the balancing account for that year shall be deemed final and conclusive.

An adjustment in the balancing account resulting in an award based on a timely Demand shall not be precluded merely because the cumulative balance in the balancing account to which the adjustment is to be made is comprised in whole or in part of amounts posted to the balancing account that have become final in accordance with this subsection, provided, however, that in no event shall there be any adjustment of amounts so posted which have become final in accordance with this subsection.

The Arbitrator may order the alteration or recalculation of underlying SFWD and/or HHWPD accounts or asset classifications that will be used to determine future suburban revenue requirements, even though the existing entries in such accounts or the asset classifications, in whole or in part, predate the four-year and eighteen-month periods described above, so long as a timely arbitration demand has been filed in accordance with this subsection.

(e) *Number And Appointment Of Arbitrators.* All arbitration proceedings under this Section shall be conducted by a single arbitrator, selected by the City and a designated representative of the suburban purchasers or each group of suburban purchasers that take the same position with respect to the arbitration within 75 days after service of the demand for arbitration. If the parties to the arbitration cannot agree on an arbitrator within 75 days, any party may petition the Superior Court in and for the County specified in Section 8.02(b), for the appointment of an arbitrator.

(f) *Guidelines For Qualifications Of Arbitrators.* The suburban purchasers and the City acknowledge that the qualifications of the arbitrator will vary with the nature of the matter arbitrated, but, in general, agree that such qualifications may include expertise in one or more of the following fields: water utility rate setting, water system and hydraulic engineering, utility accounting methods and practices, and water system operation and management. The parties to the arbitration shall use their best efforts to agree in advance upon the qualifications of any arbitrator to be appointed by the Superior Court.

(g) *Powers of Arbitrator; Conduct of Proceedings.*

(1) Except as hereinafter provided, arbitrations under this Section 8.02 shall be conducted under and be governed by the provisions of California Code of Civil Procedure, Sections 1282.2 through 1284.2 (hereinafter, collectively, "Code sections"), and arbitrators appointed hereunder shall have the powers and duties specified by the Code sections.

(2) Within the meaning of the Code sections, the term "neutral arbitrator" shall mean the single arbitrator selected by the parties to the arbitration.

(3) Unless waived in writing by the parties to the arbitration, the notice of hearing served by the arbitrator shall not be less than 90 days.

(4) The lists of witnesses (including expert witnesses), and the lists of documents (including the reports of expert witnesses) referred to in Code of Civil Procedure Section 1282.2 shall be mutually exchanged, without necessity of demand therefor, no later than 60 days prior to the date of the hearing, unless otherwise agreed in writing by the parties to the arbitration.

(5) The time for making the award shall be no later than 18 months after service of the initial demand for arbitration, provided that such time may be waived or extended as provided in Code of Civil Procedure Section 1283.8.

(6) The arbitrator shall not base his or her award on information not obtained at the hearing.

(7) The provisions for discovery set forth in Code of Civil Procedure Section 1283.05 are incorporated into and made part of this Agreement, except that: (a) leave of the arbitrator need not be obtained for the taking of depositions, including the depositions of expert witnesses; (b) the provisions of Code of Civil Procedure Section 2037 *et seq.*, relating to discovery of expert witnesses, shall also be applicable to arbitration proceedings arising under this Agreement, except that the time period set forth in Section 2037(a) shall be deemed to be not later than 60 days prior to the date for the hearing; and (c) all reports, documents, and other materials prepared or reviewed by any expert designated to testify at the arbitration shall be discoverable. In appropriate circumstances, the arbitrator may order any party to this Agreement that is not a party to the arbitration to comply with any discovery request.

(8) For the purposes of allocation of expenses and fees, as provided in Code of Civil Procedure Section 1284.2, if any two or more suburban purchasers join together in a single, joint position in the arbitration, those suburban purchasers shall be deemed to be a single party. If any suburban purchaser or purchasers join together with the City in a single joint position in the arbitration, those suburban purchasers and the City together shall be deemed to be a single party.

(9) The arbitrator shall have the power to issue orders mandating compliance with the terms of this Agreement or enjoining violations of this Agreement subject to the limitations contained herein and in Section 8.02(d). The powers of the arbitrator, with respect to any arbitration brought to redress a claimed suburban overpayment to the City, shall be limited to entering an order requiring that an adjustment be made in the amount posted to the balancing account (if not prohibited by Section 8.02(d)) or either or both of the orders described in Section 5.07(d), if appropriate under Section 5.07(d).

(10) All awards of the arbitrator shall be binding on the City and the suburban purchasers regardless of the participation or lack thereof by any suburban purchaser or the City as a party to the arbitration proceeding.

Section 8.03. *Special Provisions re Attorneys' Fees.*

(a) Each party will bear its own costs, including attorneys' fees, incurred in any arbitration or litigation arising under this Agreement or the Individual Contracts between the City and the

suburban purchasers. Notwithstanding the foregoing, the City may partly allocate to the suburban purchasers as an allowable expense under Article IV (utilizing the composite rate used for allocating other SFWD administrative and general expenses) any costs or fees incurred by the City in connection with arbitration and/or litigation arising under this Agreement and/or the Individual Contracts, except that any and all costs incurred by the City through the use of attorneys other than the San Francisco City Attorney's Office in arbitration and/or litigation arising under this Agreement and/or the Individual Contracts shall not be allocable to the suburban purchasers.

(b) If, in any litigation and/or arbitration between the parties not arising under this Agreement or the Individual Contracts but involving the respective rights and obligations of the parties *vis-a-vis* the City's Hetch Hetchy system, or water delivered therefrom (including, without limitation, litigation and/or arbitration concerning the issues specifically reserved by Sections 2.04, 5.05, 7.04, 8.01, 8.08 and 9.03(c) of this Agreement), the costs, including attorneys' fees, are awarded to the suburban purchasers, the payment of those costs and fees by the City will not be deemed an allowable expense under Article IV. If no such award is made, the City's costs and/or fees shall be allocated between the City and the suburban purchasers pursuant to this Agreement, utilizing the composite rate used for allocating other SFWD administrative and general costs. Any award to the City of fees and costs incurred in connection with such an action shall be reduced to offset the amount of the City's fees, if any, which have already been borne by the suburban purchasers pursuant to the allocation procedures set forth herein.

(c) Nothing contained in this Agreement shall require the City to change retroactively its allocation of the action's litigation costs and attorneys' fees incurred prior to the beginning of the Agreement's Term.

(d) Except as provided in subparagraphs (a) and (b), *supra*, all attorneys' fees and costs incurred by the City in connection with the operation and maintenance of the City's water supply system shall be allocated between the City and the suburban purchasers utilizing the applicable rate under Section 4.04(c).

Section 8.04. *Suburban Advisory Group.*

The parties wish to insure that the suburban purchasers may, in an orderly way, be informed of matters affecting the SFWD water system, including matters affecting the continuity and adequacy of their water supply from the City. To that end, each suburban purchaser may nominate one representative to a Suburban Advisory Group ("Group"). The City shall, through the General Manager of the SFWD and the General Manager of the HHWPD, meet with the Group (or with a subcommittee selected by the Group) semiannually, at mutually convenient times. The General Manager of the SFWD and the General Manager of the HHWPD may designate an appropriate official of their respective departments if, for illness or other reasons beyond their control, they are unable to attend. The first such meeting shall be held, if requested, no later than three months after the effective date of this Agreement. The City shall, at such meetings, provide the Group or its representatives with information on the following topics, to the extent such information is available to the City:

(a) Any capital additions being considered or planned for the SFWD and HHWPD, including the status of planning studies, financing plans, permit applications, environmental reviews, etc.;

(b) Water supply and usage trends and projections for the City, direct City water users, and the suburban purchasers, including the Commercial Division monthly reports which have been prepared by the City since the last meeting held pursuant to this Section;

(c) The status of administrative proceedings and litigation affecting the water rights to the HHWPD and SFWD sources of supply; and

(d) Existing or anticipated problems with the maintenance and repair of the water delivery system and water quality.

Additional topics shall be included on the agenda of a meeting at the request of the Suburban Representatives, provided that the City is notified of the topic no less than ten days in advance of the meeting. If the Suburban Representatives wish to inspect any documents relating to any topic on the agenda of a meeting, they shall request the City to produce such documents at the meeting no less than ten days in advance thereof. The City shall make reasonable efforts to comply with such requests for documents.

The meetings provided for by this Section are in addition to the meeting addressed to the SFWD and HHWPD budget provided for by Section 5.02, but the budget meeting and one of the meetings provided for herein may be held *seriatim*, if that is mutually convenient.

Additional meetings between the Group and the City may be held upon the request of either the City or a majority of the Group's members, provided that the General Managers of the SFWD and HHWPD shall not be obligated to attend such meetings.

Section 8.05. *Notice of Water Rights Proceedings.*

The City shall use its best efforts to give prompt notice to the suburban purchasers of any litigation or administrative proceedings to which the City is a party involving water rights to the SFWD and HHWPD sources of supply. The City's failure to provide notice as required by this Section, for whatever reason, shall not give rise to any monetary liability.

Section 8.06. *Notice.*

Except for (1) the materials which the City is required to mail to the Suburban Representatives pursuant to Sections 5.02, 5.03(a), 6.01, 6.04 and 8.11 and (2) the counterpart of this Agreement which the City is required to mail to the San Francisco Bay Area Water Users Association ("BAWUA") pursuant to Section 8.10, all notices and other documents which the City is required or permitted to send to the suburban purchasers under this Agreement shall be sent to each and all of the suburban purchasers by United States mail, first class postage prepaid, addressed to each suburban purchaser at the address to which monthly water bills are mailed by the SFWD.

All notices or other documents which the suburban purchasers or the Suburban Representatives are required or permitted to send to the City under this Agreement shall be sent by United States mail, first class postage prepaid, addressed as follows:

General Manager
San Francisco Water Department
425 Mason Street
San Francisco, CA 94102

Each suburban purchaser is a member of BAWUA, a California unincorporated association. The City shall send a copy of each notice or other document which it is required to send to all suburban purchasers or to the Suburban Representatives to BAWUA addressed as follows:

San Francisco Bay Area Water Users Association
c/o Belmont County Water District
P.O. Box 129
Belmont, CA 94002

The failure of the City to send a copy of such notices or documents to BAWUA shall not invalidate any rate set or other action taken by the City.

Any party (or BAWUA) may change the address to which notice is to be sent to it under this Agreement by notice to the City (in the case of a change desired by a suburban purchaser or BAWUA) and to the suburban purchasers and BAWUA (in the case of a change desired by the City).

The requirements of notice set forth in Section 8.02 concerning arbitration shall prevail over this Section, when they are applicable.

Section 8.07. *Rates Applicable to Other Resale Users.*

Notwithstanding any other provision of this Agreement, the City will not voluntarily provide water to any resale customer which is located west of Irvington Portal and which is not a party hereto at rates which are lower than those determined under Article IV and Section 8.01 without making such rates applicable to the suburban purchasers.

Nothing in this Section shall require the City to lower its rates to the suburban purchasers if the rate differential between the rates charged the suburban purchasers and the rates charged to resale customer(s) which are located west of Irvington Portal and which are not parties to this Agreement results (a) from a court order resulting from litigation between the City and the resale customer or the settlement of such litigation; (b) from a court order resulting from litigation between the City and another resale customer who is similarly situated or the settlement of such litigation; (c) from a court order resulting from litigation between the City and the United States (or any department or official thereof) or the settlement of such litigation; or (d) from rate structure(s) for the suburban purchaser(s) which are based upon the quantity of water used and which are designed either to discourage the use by the suburban purhasers of, or to allocate a surcharge under Section 8.01 imposed on, additional water. Nothing in this Section shall be construed as or is intended to be a concession by the suburban purchasers that the City is entitled to adopt such a rate structure or impose such a surcharge.

Section 8.08. *Changes in the City's Water Delivery System.*

The parties contemplate that, over the Term of this Agreement, the City may expand the capacity of its existing water delivery system through additions to the system and/or the replacement of existing assets. In the event such an expansion of capacity occurs, or in the event that new assets are added to the system without expanding the system's capacity, questions may arise concerning the proper classification of such new assets within the categories into which the SFWD and HHWPD rate bases are divided by this Agreement.

The parties also contemplate that, in connection with such expansion of system capacity, the City may offer to increase the Supply Assurance to the suburban purchasers set out in Section 7.01. In the event that the City offers to provide the suburban purchasers with such an increased guarantee and the suburban purchasers accept the offer, questions may arise concerning the respective City and suburban shares in the ultimate capacity of the system.

The parties shall have an obligation as to all such questions to negotiate in good faith, and if agreement between the parties is not reached, the matter shall be referred to arbitration pursuant to Section 8.02. As part of such negotiations, the parties may agree to fund studies of system capacity and usage and/or new assets by consultants selected jointly by the City and the Suburban Representatives. The expenses of any such study shall be borne one-half by the City and one-half by the suburban purchasers. Nothing in this Section shall prevent the City from unilaterally initiating studies of system capacity and usage and/or new assets by consultants of its choice and allocating the cost of such studies in accordance with the other provisions of this Agreement.

Nothing in this Agreement shall be construed to impose any obligation on the City to expand its existing water delivery system for the benefit of the suburban purchasers or to deliver to the suburban purchasers more water than that contained in the Supply Assurance set out in Section 7.01 nor shall anything herein be deemed to be a waiver of any claims by the suburban purchasers that the City has an obligation, independent of this Agreement, to do so.

Section 8.09. *Representations During Settlement Negotiations.*

During the course of settlement negotiations, the parties have exchanged various computer printouts and other materials which contain projections of the likely effect of this settlement on the suburban revenue requirement. The parties acknowledge that these projections are merely predictions by their consultants as to future events and that such projections are necessarily uncertain. Each party signing this Agreement therefore releases all other parties to this Agreement, and each other party's lawyers and expert accounting and engineering consultants, from any and all liability arising from the sharing of projections, computer printouts, or any other representations as to the likely effect of this Agreement. Each party signing this Agreement has been fully advised by its attorneys, and their accounting and engineering experts, on the contents of this Agreement and its legal effects.

Section 8.10. *Counterparts.*

Execution of this Agreement may be accomplished by execution of separate counterparts by each signatory. The City shall deliver its executed counterpart to the Bay Area Water Users Association and the counterpart which each suburban purchaser executes shall be delivered to the City. The separate executed counterparts, taken together, shall constitute a single agreement. When this Agreement becomes effective pursuant to Section 2.01, the City shall provide any suburban purchaser that so requests a counterpart original of this Agreement signed on behalf of the City.

Section 8.11. *SFWD Rules and Regulations.*

The sale and delivery of all water hereunder shall be subject to such of the "Rules and Regulations Governing Water Service to Customers" of the SFWD adopted by the SFPUC, as those Rules and Regulations may be amended from time to time, as are (1) applicable to the sale and delivery of water to the suburban purchasers, (2) reasonable, and (3) not inconsistent with either this Agreement or with an Individual Contract.

The City will give the Suburban Representatives notice of any proposal to amend the Rules and Regulations in a manner which would affect the suburban purchasers. The notice will be delivered at least thirty days in advance of the date on which the proposal is to be considered by the SFPUC and will be accompanied by the text of the proposed amendment.

Section 8.12. *Preservation of Water Rights.*

It is the intention of the City to preserve all of its water rights, whether or not the water to which the City presently holds water rights is allocated under this Agreement. Nothing in this Agreement shall be construed as an abandonment by the City, or an intention by the City to abandon, any of the water rights that it presently possesses.

Section 8.13. *Suburban Representatives.*

As used in this Agreement, the term "Suburban Representatives" shall mean the five suburban purchasers selected by the suburban purchasers as a group to exercise the rights granted to and fulfill the obligations imposed upon the Suburban Representatives by this Agreement. If the suburban purchasers fail to select Suburban Representatives, the Suburban Representatives shall be the five suburban purchasers which purchased the largest quantity of water during the prior fiscal year. The suburban purchasers shall promptly notify the City of any changes in the Suburban Representatives whom they have selected and the City shall be entitled to assume that the Suburban Representative(s), once selected by the suburban purchasers or chosen pursuant to this Section, shall continue in that role, until the City receives information of any such change.

Section 8.14. *Reservation of Claims Regarding Suburban Purchase of Water From In-City Retail Distribution System.*

(a) Nothing in this Agreement shall prevent the City and any suburban purchaser from providing by contract that the City may charge rates which are higher than those which would otherwise be proper under this Agreement for water delivered by the City to the suburban purchaser through transmission and distribution lines and mains in the in-City retail distribution system (i.e., transmission mains and distribution lines located within the City's geographical limits other than those which deliver water from Hetch Hetchy and local sources to Sunset, University Mound, and Merced Manor Reservoirs). Nothing in this Agreement shall be construed to waive or compromise the City's claim that it is entitled to charge such higher rates for water delivered through the in-City retail distribution system or the suburban purchasers' denial of such claim. Nothing in this Agreement shall obligate the City to supply any suburban purchaser with water delivered through the in-City retail distribution system.

(b) Any water delivered by the City to any suburban purchaser through the in-City retail distribution system and paid for at rates which are greater than those which would otherwise be proper under this Agreement shall be counted as City usage for the purpose of determining the ratios used to allocate assets and expenses pursuant to this Agreement.

The City has, prior to the Term of this Agreement, provided a portion of the water it delivers to Daly City through two connections to its in-City retail distribution system located within the City's boundaries. The parties hereto recognize that the Individual Contract between the City and Daly City will provide for the continuation of this arrangement under the mutually acceptable terms, conditions and limits set forth therein. This Individual Contract will also provide that water delivered by the City to Daly City through these two connections shall be billed at the same rates as water delivered to the other suburban purchasers. No party hereto will contend that the continuation of this arrangement as provided in the City-Daly City Individual Contract is a precedent for or otherwise obligates the City to furnish it water through the in-City retail distribution system or, if water is so furnished, to charge for such water only at rates otherwise proper under this Agreement. The provisions of the preceding sentence shall apply to Daly City insofar as additional in-City connections, or enlargements of the existing meters and services, are concerned.

Section 8.15. *Expenses Chargeable to Individual Suburban Purchasers.*

The expenses associated with the following services shall be directly chargeable to and payable by the individual suburban purchaser for which the service is rendered and shall not be chargeable to the suburban purchasers generally under Article IV:

(a) installation of meters and service connections;

(b) relocation of meters and service connections;

(c) enlargement of meters and service connections;

(d) removal of meters and service connections; and

(e) modification of meters and service connections as requested by an individual suburban purchaser.

Section 8.16. *Incorporation of Exhibits.*

Exhibits A through O, referred to herein, are incorporated in and made a part of this Agreement.

Section 8.17. *Actions and Approvals by the City.*

Whenever City action or approval is required or contemplated by this Agreement, authority to act or approve shall be exercised by the SFPUC or its designee, except if such action or approval is required by law to be taken or given by the City's Board of Supervisors.

Section 8.18. *Filing of Notices.*

Within five days after the effective date of this Agreement, the City shall file a Notice of Exemption, in the form provided for by 14 Cal. Admin. Code Section 15062, with the County Clerks of the City and County of San Francisco and the Counties of San Mateo, Santa Clara and Alameda. If the City fails to file the notices in the time and manner provided for herein, then the Plaintiffs, or any of them, are authorized to do so on behalf of the City. In the event any action or proceeding is filed against any party to this Agreement attacking the validity of the determination underlying the Notice, any other party to this Agreement may be joined as a defendant or respondent therein by motion of the party named in the action or proceeding and agrees not to oppose such joinder.

Section 8.19. *Section Headings.*

The marginal headings and titles to the sections and paragraphs of this Agreement are not a part of this Agreement and shall have no effect upon the construction or interpretation of any part hereof.

ARTICLE IX

IMPLEMENTATION AND SPECIAL PROVISIONS AFFECTING CERTAIN SUBURBAN PURCHASERS

Section 9.01. *General.*

As described in Section 7.02, the City previously entered into water supply contracts with each of the suburban purchasers, typically for terms of 20 years. The initial terms of the majority of those contracts have now expired and, except as provided below, the suburban purchasers will execute new water supply contracts with the City concurrently with their approval of this Agreement. These Individual Contracts will describe the service areas of each suburban purchaser, identify the size and location of connections between the SFWD transmission system and the suburban purchaser's distribution system, provide for periodic rendering and payment of bills for water usage, and in some instances, contain additional specialized provisions unique to each purchaser and not of general concern or applicability. A sample of the Individual Contract to be entered into is attached as Exhibit L. The Individual Contracts between the City and the suburban purchasers will not contain any provisions inconsistent with Articles I through VIII of this Agreement, except: (1) as provided below in this Article; or (2) to the extent that such provisions are not in derogation of the rights that other suburban purchasers have under this Agreement and their Individual Contracts. Any provisions in an Individual Contract which are in violation of this Section shall be void.

Section 9.02. *California Water Service Company.*

The parties recognize that the California Water Service Company, one of the suburban purchasers, is a private, for-profit corporation and, as such, has no claim to co-grantee status under the Act, which specifically bars private parties from receiving for resale any water produced by the City's Hetch Hetchy system or otherwise subject to the Raker Act. The parties also recognize that the California Water Service Company is a member of the Bay Area Water Users Association, the entity which has coordinated Plaintiffs' maintenance of the action, and that the suburban purchasers have insisted upon the inclusion of the California Water Service Company as a party to this Agreement as a precondition for their own acquiescence hereto. Accordingly, the following provisions shall apply to the California Water Service Company, anything to the contrary elsewhere in this Agreement notwithstanding:

(a) The total quantity of water delivered by the City to the California Water Service Company shall not in any calendar year exceed 47,400 acre feet, unless through improvements in the City's local production facilities in Santa Clara, Alameda, San Mateo, or San Francisco Counties, made after August 21, 1961 (the date of the previous contract between the City and California Water Service Company) the City develops or has developed additional local sources in those counties, in which event the maximum stated herein may be increased by the City, upon determination by it of the need by California Water Service Company for water service in excess of the maximum stated herein. Such an increase shall automatically increase the Supply Assurance commitment to the suburban purchasers collectively (including the California Water Service Company) by an equivalent amount, but only if it is based on development of additional local sources after the effective date of this Agreement. It is agreed that the City has no obligation to deliver water to California Water Service Company in excess of the maximum stated herein, except as such maximum may be increased by the City pursuant to this subsection. Nothing in this Agreement shall preclude the City from selling water to any county, city, town, district, political subdivision, or other public agency for resale to customers within the service area of the California Water Service Company. The maximum annual quantity set forth in this subsection is intended to be a limitation on the total quantity of water that may be allocated to California Water Service Company; it is not itself intended to serve as an allocation of water under Section 7.02.

(b) Nothing in this Agreement shall require or contemplate any delivery of water to California Water Service Company in violation of the Act, which statute imposes certain obligations upon the City as a grantee from the United States in regard to the disposal of water and electricity from the Hetch Hetchy project.

(c) Nothing in this Agreement shall alter, amend or modify the Findings of Fact and Conclusions of Law and the Judgment dated May 25, 1961, in that certain action entitled *City and County of San Francisco v. California Water Service Company* in the Superior Court of the State of California in and for the County of Marin, No. 23286, as modified by the Quitclaim Deed from California Water Service Company to the City dated August 22, 1961. The rights and obligations of the City and California Water Service Company under these documents shall continue as therein set forth.

(d) Notwithstanding anything in Section 7.06 to the contrary, California Water Service Company shall have the right to assign to a public agency having the power of eminent domain all or a portion of the rights of California Water Service Company under any contract between it and the City applicable to any individual district of California Water Service Company in connection with the acquisition by such public agency of all or a portion of the water system of California Water Service Company in such district. In the event of any such assignment of all the rights, privileges and obligations of California Water Service Company under such contract, California Water Service Company shall be relieved of all further obligations under such contract provided that the assignee public agency expressly assumes the obligations of California Water Service Company thereunder. In the event of such an assignment of a portion of the rights, privileges and obligations of California Water Service Company under such contract, California Water Service Company shall be relieved of such portion of such obligations so assigned thereunder provided that the assignee public agency shall expressly assume such obligations so assigned to it.

Section 9.03. *City of San Jose and City of Santa Clara.*

The suburban purchasers recognize that the City has in the past provided water to the City of San Jose ("San Jose") and the City of Santa Clara ("Santa Clara") on a temporary and limited basis. In light of this fact, certain provisions of this Agreement shall be inapplicable to San Jose and Santa Clara, in the following respects:

(a) *City of San Jose.* The City's last agreement with San Jose expired on June 30, 1982. Water delivered to San Jose by the City between July 1, 1982 and July 31, 1983 shall be charged by the City and paid for by San Jose at the City's water rates which were in effect prior to July 31, 1983. From August 1, 1983 through June 30, 1985, the City will furnish water to San Jose at the same rates as those applicable to other suburban purchasers pursuant to this Agreement. On or before July 1, 1985, the City will exercise one of the following options with respect to its continuing water service to San Jose after that date.

(i) The City may elect to take on San Jose as a permanent customer, subject to minimum and maximum water delivery levels to be negotiated between the City and San Jose, provided that San Jose's service area and maximum annual usage during the balance of the Term of this Agreement shall not exceed those shown in Exhibit M. If the City so elects and San Jose accepts this offer: (1) San Jose will pay for water in accordance with the methodology set forth in this Agreement, such rates to be identical to those charged the other suburban purchasers; (2) water delivered to San Jose shall be included within the Supply Assurance; (3) San Jose will be entitled to a supply guarantee (to be included within the Supply Assurance) based on its usage during calendar year 1981 (500,239,960 gallons); and (4) its share of residual water will be determined in accordance with Section 7.02.

(ii) Alternatively, the City may continue to sell water to San Jose on a temporary and, after June 30, 1987, interruptible basis, but at rates identical to those charged other suburban

purchasers. If the City continues to provide water to San Jose on a temporary and, after June 30, 1987, interruptible basis, the amount of water furnished to San Jose shall not be included within the Supply Assurance. The City will provide at least two years notice to San Jose prior to termination of service, and the water delivered to San Jose after June 30, 1987, shall be limited by the City's ability to meet the full needs of all its other water customers (including in-City residents and other direct City water users). Delivery of water to San Jose may be subject to minimum and maximum water delivery levels, which will be negotiated between the City and San Jose, provided that San Jose's service area and maximum annual usage shall not exceed that set forth in Exhibit M.

(iii) Finally, the City may elect to terminate its water service to San Jose. If the City elects to exercise this option, it shall notify San Jose of its intention to do so no later than July 1, 1985, and the termination of service shall occur no earlier than July 1, 1987.

(b) *City of Santa Clara.* The City's existing contract with Santa Clara expires on June 30, 1984. From July 1, 1984 through June 30, 1985, the City shall furnish water to Santa Clara on the same rates as those applicable to other suburban purchasers pursuant to this Agreement. On or before July 1, 1985, the City will exercise one of the following options with respect to its continuing water service to Santa Clara after that date.

(i) The City may elect to take on Santa Clara as a permanent customer, subject to maximum and minimum water delivery levels to be negotiated between the City and Santa Clara, provided that Santa Clara's service area and maximum annual usage during the balance of the Term of this Agreement shall not exceed those shown in Exhibit M. If the City so elects and Santa Clara accepts this offer: (1) Santa Clara will continue to pay for water in accordance with the methodology set forth in this Agreement, such rates to be identical to those charged the other suburban purchasers; (2) water delivered to Santa Clara shall be included within the Supply Assurance; (3) Santa Clara will be entitled to a supply guarantee (to be included within the Supply Assurance) based on its usage during calendar year 1981 (633,810,320 gallons); and (4) its share of residual water will be determined in accordance with Section 7.02.

(ii) Alternatively, the City may continue to sell water to Santa Clara on a temporary and, after June 30, 1987, interruptible basis, but at rates identical to those charged other suburban purchasers. If the City continues to provide water to Santa Clara on a temporary and, after June 30, 1987, interruptible basis, the amount of water furnished to Santa Clara shall not be included within the Supply Assurance. The City will provide at least two years notice to Santa Clara prior to termination of service, and the water delivered to Santa Clara after June 30, 1987, shall be limited by the City's ability to meet the full needs of all its other water customers (including in-City residents and other direct City water users). Delivery of water to Santa Clara may be subject to minimum and maximum water delivery levels, which will be negotiated between the City and Santa Clara, provided that Santa Clara's service area and maximum annual usage shall not exceed that set forth in Exhibit M.

(iii) Finally, the City may elect to terminate its water service to Santa Clara. If the City elects to exercise this option, it shall notify Santa Clara of its intention to do so no later than July 1, 1985, and the termination of service shall occur no earlier than July 1, 1987.

(c) In signing this Agreement, neither San Jose nor Santa Clara waives any of its rights to contend, in the event the City does not elect to take it on as a permanent customer in 1987, that it is entitled to that status and to be charged rates identical to those charged other suburban purchasers under this Agreement, pursuant to the Raker Act or any other federal or state law. In signing this Agreement, the City does not waive its right to deny any or all of such contentions.

If, as the result of litigation between San Jose and/or Santa Clara, on the one hand, and the City, on the other, a court of competent jurisdiction enters a final judgment declaring that San Jose and/or Santa Clara are entitled to become permanent water customers of the City and/or compelling the City to provide water to San Jose and/or Santa Clara on a permanent basis, water provided to San Jose and Santa Clara thereafter shall be included within the Supply Assurance.

(d) If the City initially elects to sell water to San Jose and/or Santa Clara on a temporary and interruptible basis pursuant to subsections (a)(ii) and/or (b)(ii), *supra,* it may thereafter elect to take on San Jose and/or Santa Clara as permanent customers, pursuant to subsections (a)(i) and/or (b)(i), *supra,* provided that it so elects on or before June 30, 1988.

Section 9.04. *City of Hayward.*

The City and the City of Hayward ("Hayward") entered into a water supply contract on February 9, 1962 (the 1962 contract) which provides, *inter alia,* that the City will supply Hayward with all water supplemental to sources and supplies of water owned or controlled by Hayward as of that date, in sufficient quantity to supply the total water needs of the service area described on an exhibit to the 1962 contract "on a permanent basis."

The intention of the parties is to continue the 1962 contract in effect, as the individual water supply contract between the City and Hayward. Accordingly, it shall not be necessary for the City and Hayward to enter into a new Individual Contract pursuant to this Article and approval of this Agreement by Hayward shall constitute approval of both this Agreement and an Individual Contract for purposes of Section 2.01. The 1962 contract will continue to describe the service area of Hayward, while rates for water delivered to Hayward during the Term of this Agreement shall be governed by Article IV hereof. The 1962 contract will continue in force after the expiration of the Term of this Agreement.

Section 9.05. *Estero Municipal Improvement District.*

The City and the Estero Municipal Improvement District ("Estero") entered into a water supply contract on August 24, 1961, the term of which continues until August 24, 2011 (the 1961 contract). The 1961 contract provides, *inter alia,* that the City will supply Estero with all water supplemental to sources and supplies of water owned or controlled by Estero as of that date, in sufficient quantity to supply the total water needs of the service area described on an exhibit to the 1961 contract.

The intention of the parties is to continue the 1961 contract in effect, as the Individual Contract between the City and Estero. Accordingly, it shall not be necessary for the City and Estero to enter into a new Individual Contract pursuant to this Article and approval of this Agreement by Estero shall constitute approval of both this Agreement and an Individual Contract for purposes of Section 2.01. The 1961 Contract shall continue to describe the service area of Estero, rates for water delivered to Estero during the Term of this Agreement shall be governed by Article IV hereof, and the 1961 contract will continue in force after the expiration of the Term of this Agreement for the balance of its Term (i.e., until August 24, 2011). The supply guarantee applicable to Estero shall be determined by reference to the 1961 contract, as of the calendar year prior to its expiration (i.e., 2010).

Section 9.06. *Alameda County Water District.*

The City and the Alameda County Water District ("Alameda") entered into a water supply contract on November 30, 1965, the term of which continues until November 30, 1985 (the 1965 contract). The 1965 contract provides, *inter alia,* that the City will supply Alameda with specified quantities of water during its term in accordance with a schedule of deliveries, for use in the service area described in an exhibit to the 1965 contract. The schedule of deliveries specifies that from Fiscal Year 1981/82 until the expiration date of the 1965 contract, the deliveries will range from a

minimum of 5.36 mgd on a monthly basis to a maximum of 16.08 mgd on a daily basis and that the City is not obligated to furnish water at an instantaneous rate of delivery (i.e., during a maximum hour) at more than 120% of the rate of the 16.08 mgd maximum day rate.

The parties intend to continue the 1965 contract for the balance of its term (i.e., until November 30, 1985), during which the minimum monthly and maximum daily and hourly deliveries will continue as provided in the 1965 contract. The parties also intend to determine Alameda's supply guarantee for purposes of Section 7.02 by reference to Alameda's actual water usage during calendar year 1984. (Exhibit K-1, which contains an estimate of that usage, will be automatically amended when the actual usage data for 1984 become available.) The parties further intend, however, to enter into a new water supply contract prior to May 25, 1984 concurrently with their approval of this Agreement, which will serve as the Individual Contract for the balance of the Term of this Agreement. This new contract will contain minimum water delivery levels and may contain maximum water delivery levels, as provided in Section 7.07.

Section 9.07. *Dimond Public Utility District/City of Daly City.*

The City and the City of Daly City ("Daly City") entered into a water supply contract on December 22, 1960, the term of which ended on January 3, 1981. The City and the Dimond Public Utility District ("Dimond") entered into a water supply contract on December 1, 1960, the term of which continues until November 30, 1985 (the 1960 Dimond contract). Dimond subsequently has merged its water distribution system with Daly City. The parties intend to terminate the 1960 Dimond contract concurrently with the execution of this Agreement and the approval of a new Individual Contract with Daly City with a term of 25 years commencing July 1, 1984. In doing so, however, the parties also intend to determine Daly City's supply guarantee for purposes of Section 7.02 by reference to Daly City's water usage during calendar year 1981, as provided for by the 1960 Daly City contract, and by reference to water usage in the former Dimond service area during calendar year 1984, as provided for by the 1960 Dimond contract. The Daly City guarantee for purposes of Section 7.02 shall be the sum of Daly City's calendar year 1981 usage and the calendar year 1984 usage in the former Dimond service area. (Exhibit K-1, which contains actual 1981 Daly City usage and an estimate of 1984 Dimond usage will be automatically amended when the actual usage data for the Dimond service area in 1984 become available.)

Section 9.08. *Coastside County Water District.*

The City and the Coastside County Water District ("Coastside") entered into a water supply contract on January 12, 1971, the term of which continues until January 11, 1991 (the 1971 contract).

The parties intend to terminate the 1971 contract concurrently with the execution of this Agreement and the approval of a new Individual Contract with a term of 25 years commencing July 1, 1984. The new Individual Contract will modify the 1971 contract in certain respects including the following:

(a) The schedule of estimated deliveries during 1985 and 1990 (7.6 mgd and 10.0 mgd, respectively) will be eliminated, and Coastside will receive water from the City pursuant to the terms of Sections 7.01, 7.02 and 7.03 of this Agreement.

(b) Coastside's supply assurance for purposes of Section 7.02 will be determined by reference to its water usage during calendar year 1981, as provided in Section 7.02 and Exhibit K-1 of this Agreement. Water delivered to Coastside will be included within the Supply Assurance contained in Section 7.01.

Section 9.09. *Stanford University.*

The parties recognize that The Board of Trustees of The Leland Stanford Junior University ("Stanford") operates a non-profit university, and purchases water from the City for redistribution to

the academic and related facilities and activities of the university and to residents of Stanford, the majority of whom are either employed by or students of Stanford. Consistent with its prior contract with the City dated August 18, 1960, Stanford agrees that all water furnished by the City shall be used by Stanford only for domestic purposes and those directly connected with the academic and related facilities and activities of Stanford, and no water furnished by the City shall be used in any area now or hereafter leased or otherwise used for commercial or industrial purposes. Stanford further agrees not to use any water from any source whatsoever not in accordance with the foregoing provisions of this Section by substituting therefor water purchased from the City, without obtaining the prior written approval of the General Manager of the SFWD.

Nothing in this Agreement shall preclude the City from selling water to any county, city, town, political subdivision or other public agency for resale to Stanford or to customers within the service area of Stanford.

Notwithstanding anything in Section 7.06 to the contrary, Stanford shall have the right to assign to a public agency having the power of eminent domain all or a portion of the rights of Stanford under this Agreement or the individual contract between it and the City in connection with the acquisition by such public agency of all or a portion of Stanford's water system. In the event of any such assignment of all the rights, privileges, and obligations of Stanford under such contract, Stanford shall be relieved of all further obligations under such contract, provided that the assignee public agency expressly assumes Stanford's obligations thereunder. In the event of such an assignment of a portion of the rights, privileges, and obligations of Stanford under such contract, Stanford shall be relieved of such portion of such obligations so assigned thereunder, provided that the assignee public agency shall expressly assume such obligations so assigned to it.

Nothing in this Agreement shall require or contemplate any delivery of water to Stanford in violation of the Raker Act, which statute imposes certain obligations upon the City as a grantee from the United States in regard to the disposal of water and electricity from the Hetch Hetchy project.

Section 9.10. *City of Brisbane, Guadalupe Valley Municipal Improvement District, Town of Hillsborough.*

The parties acknowledge that the City has heretofore provided certain quantities of water to the City of Brisbane ("Brisbane"), Guadalupe Valley Municipal Improvement District ("Guadalupe") and the Town of Hillsborough ("Hillsborough") at specified rates or without charge pursuant to obligations arising out of agreements between the predecessors of the City and these parties, which agreements are referred to in judicial orders, resolutions of the SFPUC and/or the 1960 contracts between the City and Brisbane, Guadalupe and Hillsborough. The parties intend to continue those arrangements and accordingly agree as follows:

(a) Nothing in this Agreement is intended to alter, amend or modify the terms of Resolution No. 74-0653 of the SFPUC or the indenture of July 18, 1908 between the Guadalupe Development Company and the Spring Valley Water Company.

(b) Nothing in this Agreement is intended to alter, amend or modify the Findings of Fact and Conclusions of Law and Judgment dated May 25, 1961 in that certain action entitled *City and County of San Francisco v. Town of Hillsborough* in the Superior Court of the State of California in and for the County of Marin, No. 23282, as modified by the Satisfaction of Judgment filed October 23, 1961 and the Compromise and Release between Hillsborough and the City dated August 22, 1961. The rights and obligations of the City of Hillsborough under these documents shall continue as therein set forth.

(c) Nothing in this Agreement is intended to affect or prejudice any claims, rights or remedies of Guadalupe or of Crocker Estate Company, a corporation, or of Crocker Land Company, a corporation, or of the City, or of their successors and assigns, respectively, with respect to or

arising out of that certain deed dated May 22, 1884, from Charles Crocker to Spring Valley Water Works, a corporation, recorded on May 24, 1884, in Book 37 of Deeds at page 356, Records of San Mateo County, California, as amended by that certain Deed of Exchange of Easements in Real Property and Agreement for Trade in Connection Therewith, dated July 29, 1954, recorded on August 4, 1954, in Book 2628, at page 298, Official Records of said San Mateo County, or with respect to or arising out of that certain action involving the validity or enforceability of certain provisions of said deed entitled *City and County of San Francisco v. Crocker Estate Company*, in the Superior Court of the State of California in and for the County of Marin, No. 23281.

DATED: August 8, 1984

CITY AND COUNTY OF SAN FRANCISCO

By _____

Rudolph Nothenberg, General Manager of Public Utilities

Authorized by Public Utilities Commission

Resolution No. 84-0144

Adopted April 10, 1984

Romaine A. Boldridge

Romaine A. Boldridge, Secretary

Approved as to form:

GEORGE AGNOST
City Attorney

By _____

McMorris M. Dow, Utilities General Counsel

Approved by Board of Supervisors

~~Resolution~~ Ordinance No. 320-84

Adopted June 25, 1984

John L. Taylor

John L. Taylor, Clerk

DATED: _____

CITY OF BRISBANE

By _____

Name: Jeannine Hodge

Title: Mayor

Authorized by Ordinance No. _____/Resolution No. 84-37/Motion

(Indicate form of action and number if appropriate)

Adopted May 21, 1984

Richard R. Kerwin

Name: RICHARD R. KERWIN

Title: Secretary/City Clerk

ATTACHMENT F

Water Supply Contract between the City and County of San Francisco and the City of Brisbane

BRISBANE MEMORANDUM

TO: City Manager

DATE: June 8, 1984

FROM: Finance Director

SUBJECT: Water Supply Contract

The attached "Individual Water Supply Contract" was contemplated by the "Settlement Agreement and Master Water Sales Contract" approved by the City Council on May 14, 1984. The reason this water supply contract was not submitted to the City Council for approval at the same time as the Master Agreement is because it was being drafted by the San Francisco Attorneys, who were trying to incorporate into the individual agreement the following items requested by the Brisbane City Staff:

1. to continue to protect the reduced prices for the first 100,000 gallons daily the City is currently entitled to; and
2. to insure that upon the dissolution of GVMID, the City of Brisbane will, as a matter of course, become entitled to the annual water quantities allowable to GVMID; and
3. to insure that the "service area" constitutes the areas which were annexed to the City of Brisbane on July 19, 1983. (see Exhibit A attached)

RECOMMENTDATIONS:

With the above items now fully incorporated into the Water Supply Contract and/or its Exhibits, it is recommended that the City Council adopt the attached Resolution authorizing the execution of the "Water Supply Contract" with the City and County of San Francisco.

WATER SUPPLY CONTRACT

This Contract, dated as of August 8, 1984, is entered into by and between the City and County of San Francisco ("City") and the City of Brisbane ("Customer").

RECITALS

The City and the Customer have entered into a Settlement Agreement and Master Water Sales Contract ("Master Agreement"), which sets forth the terms and conditions under which the City will continue to furnish water for domestic and other municipal purposes to Customer and to other suburban purchasers. The Master Agreement contemplates that the City and each individual suburban purchaser will enter into individual contracts describing the location or locations at which water will be delivered to each purchaser by the San Francisco Water Department ("SFWD"), the purchaser's service area within which water so delivered is to be sold and other similar provisions unique to the individual purchaser. This Water Supply Contract is the Individual Contract contemplated by the Master Agreement.

AGREEMENTS OF THE PARTIES

1. Incorporation of the Master Agreement

The terms and conditions of the Master Agreement are

incorporated into this Contract as if set forth in full herein.

2. Term

Except as provided to the contrary in Article IX of the Master Agreement, the term of this Contract shall be that provided in Section 3.01 of the Master Agreement.

3. Service Area

Water delivered by the City to the Customer may be used or sold within the service area shown on the map designated Exhibit A attached hereto. Except as provided in Section 7.05 of the Master Agreement, Customer shall not use or sell any water delivered by the City outside this service area without the prior written consent of the City.

4. Location and Description of Service Connections

Sale and delivery of water to Customer will be made through a connection or connections to the SFWD system at the location or locations shown on Exhibit A attached hereto and with the applicable present account number, description, connection size, and meter size as shown on Exhibit B attached hereto.

5. Interties With Other Water Systems

As of the commencement date of this Contract, Customer maintains no interties with neighboring water systems.

6. Billing and Payment

The City shall compute the amounts of water delivered and bill Customer therefor on a monthly basis consistent with existing practice. Beginning July 1, 1986, the bill shall show the separate components of the charge (e.g., service, consumption, demand). Customer shall pay the amount due within thirty (30) days after receipt of the bill.

If Customer disputes the accuracy of any portion of the water bill it shall (a) notify the General Manager of the SFWD in writing of the specific nature of the dispute and (b) pay the undisputed portion of the bill within thirty (30) days after receipt. Customer shall meet with the General Manager of the SFWD or a delegate to discuss the disputed portion of the bill.

7. Guadalupe Valley Municipal Improvement District

Customer has annexed the existing service area of the Guadalupe Valley Municipal Improvement District ("GVMID"), which service area is shown on Exhibit A attached hereto. If and when GVMID is dissolved and Customer assumes the powers of GVMID, Customer shall succeed to the rights and obligations of GVMID under the Master Agreement and GVMID's Individual Contract (including, but not limited to, GVMID's individual supply guarantee as described in Section 7.02 of the Master Agreement and the definition of GVMID's service area as

shown on Exhibit A of GVMID's Individual Contract) in accordance with Section 7.06 of the Master Agreement.

8. Reduced-Priced Water

Pursuant to rights heretofore granted to Customer, recognized by the City, and confirmed by court order, the City presently delivers and shall continue to deliver to Customer 100,000 gallons of water per day at a rate of $.15 per 1,000 gallons. Customer shall pay for the balance of the water supplied by the City at rates set pursuant to the Master Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Contract, to become effective upon the effectiveness of the Master Agreement, by their duly authorized

representatives.

DATED: August 8, 1984.

Authorized by Public Utilities Commission Resolution No. 84-0144 Adopted April 10, 1984.

Romaine A. Boldridge
Romaine A. Boldridge, Secretary

Approved by Board of Supervisors ~~Resolution~~ Ordinance No. 320-84 Adopted June 28, 1984.

John L. Taylor
John L. Taylor Clerk

DATED: _____, 1984.

CITY AND COUNTY OF SAN FRANCISCO

By _____
Rudolf Nothenberg
General Manager of
Public Utilities

APPROVED AS TO FORM:
GEORGE AGNOST
CITY ATTORNEY
BY _____
UTILITIES GENERAL COUNSEL

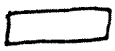
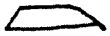
CITY OF BRISBANE

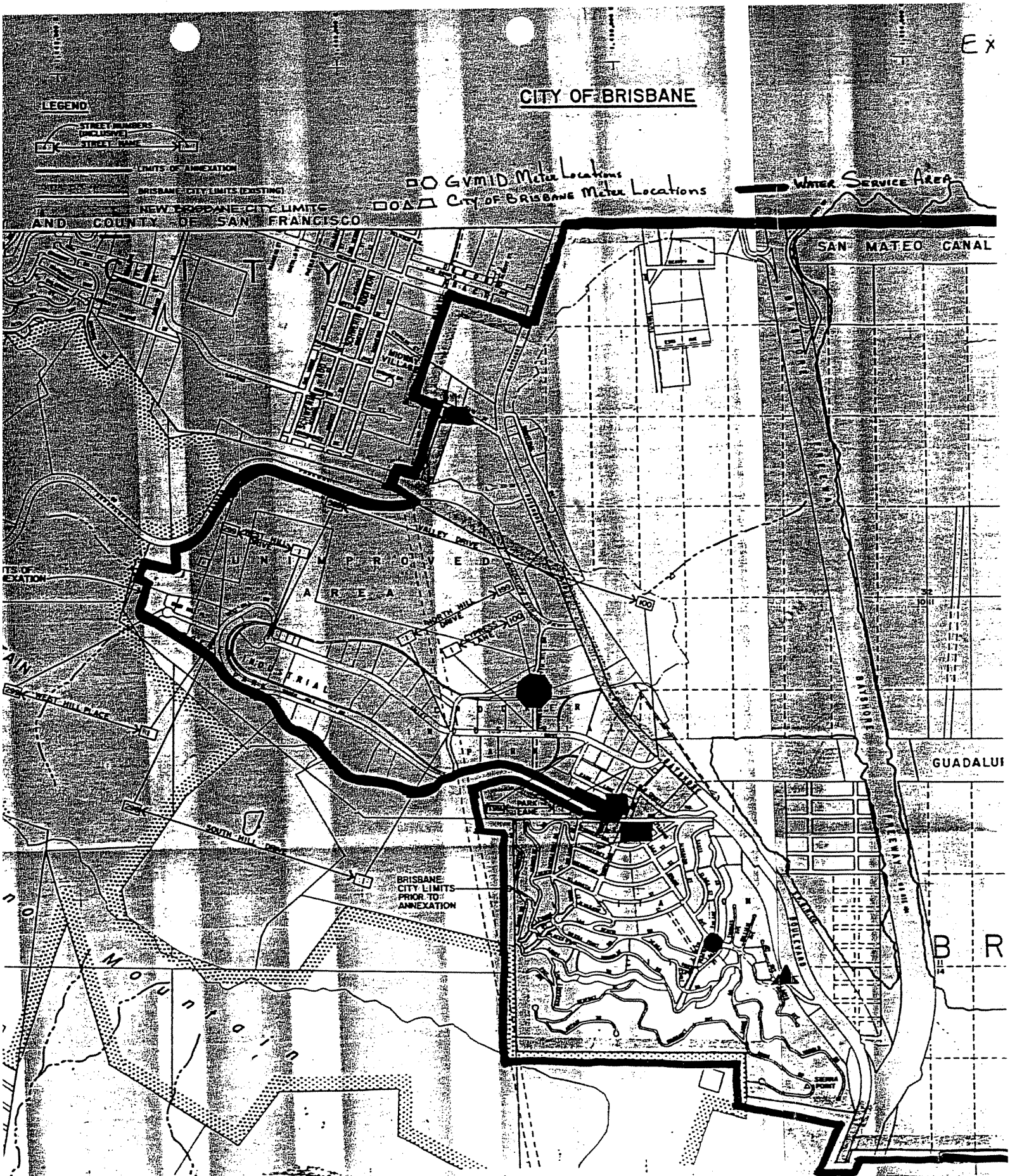
By _____

Its Mayor

Authorized by Resolution No. 84-45 of the Brisbane City Council

051684/5-196603Qm

Symbol on Exhibit A		SFWD Account No.	Location	Connections & Meter Size
B-1		801-6030-1	San Bruno Ave. & San Francisco Ave.	8 inch
B-2		801-6030-1	San Bruno Ave. & Santa Clara St.	6 inch
B-3		801-6030-1	Main St. & Old Bayshore	2-8 inch
B-4		801-6060-1	San Bruno Ave. & Gladys Ave.	~~2-6 inch~~ 1-6 inch & 1-8 inch effective 9.1.87



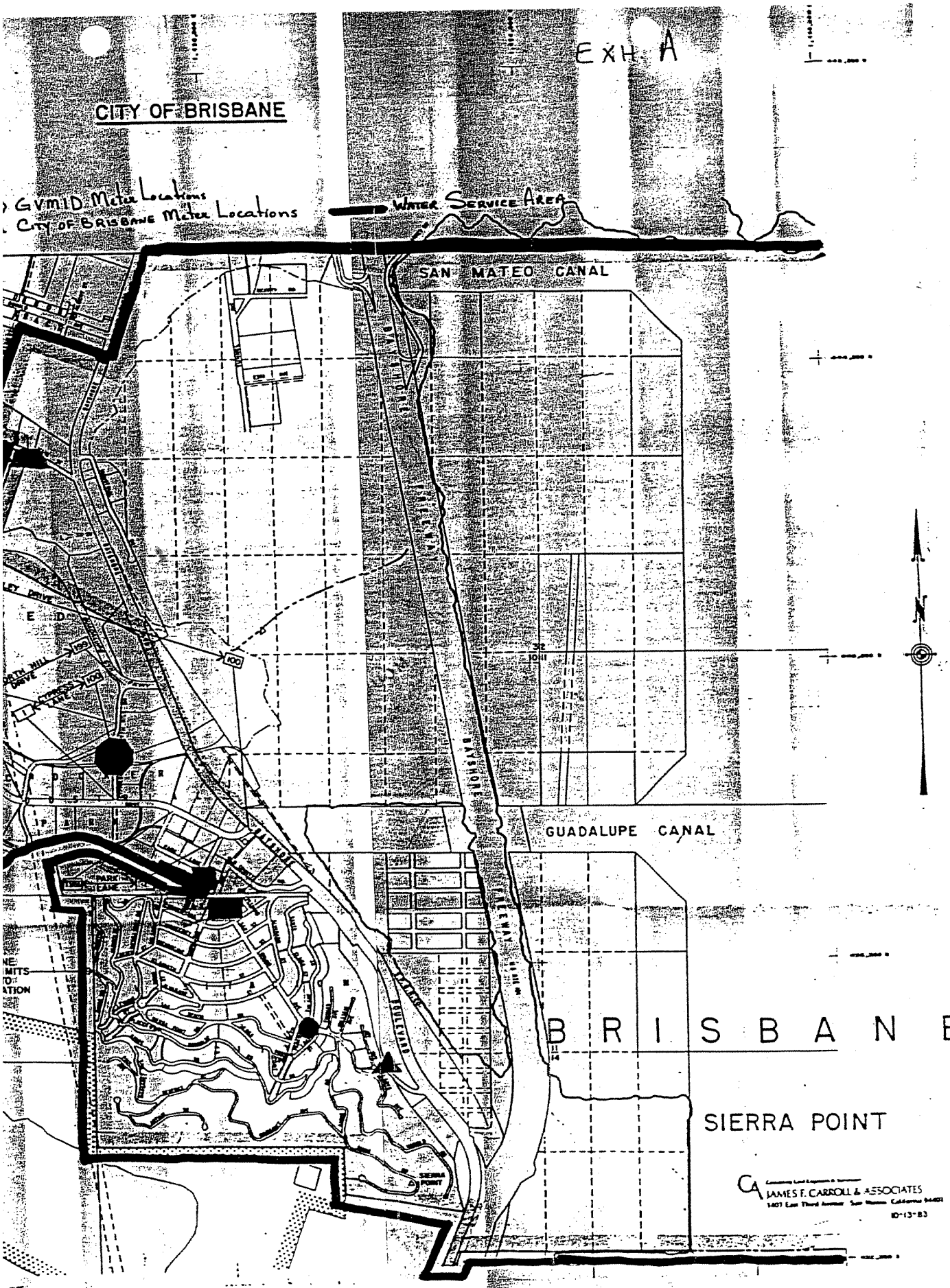
C.R. Mentz 6.7.84

By: C.R. Mentz, Public Works Director Date

EXH A

CITY OF BRISBANE

GVMID Meter Locations
City of Brisbane Meter Locations



C.R. Mentz 6.7.84

: C.R. Mentz, Public Works Director Date

ATTACHMENT G

Interim Water Shortage Allocation Plan (IWSAP)

City of Brisbane
Agenda Report

TO: Honorable Mayor and City Council, and Board Members of the Guadalupe Valley Municipal Improvement District

FROM: Director of Public Works/City Engineer via City Manager

DATE: Meeting of May 29, 2001

SUBJECT: Interim Water Shortage Allocation Plan

RECOMMENDATION:

That the City Council adopt Resolution No. 2001-49 approving the Interim Water Shortage Allocation Plan, and that the Board Members of GVMID adopt Resolution No. 2001-48 approving the Interim Water Shortage Allocation Plan.

BACKGROUND AND DISCUSSION:

The City of Brisbane (Brisbane) and the Guadalupe Valley Municipal Improvement District (GVMID) purchase water from the City and County of San Francisco Public Utilities Commission (SFPUC) in accordance with the 1984 Settlement Agreement and the Master Water Sales Contract (Master Contract). Under the provisions of the contract, the SFPUC prepares an annual projection of water available and demand from both San Francisco city users and from suburban users. If a water shortage is projected, present contract language allocates water to each suburban agency based on its proportionate water purchases in the preceding normal supply year.

The present allocation method discourages suburban agencies from establishing water recycling and conservation programs that would reduce purchases during normal water supply years. Agencies that establish such programs could potentially be at a disadvantage during a water shortage compared to agencies that do not reduce demand.

Recognizing this concern, the Bay Area Waters Users Association (BAWUA) worked with SFPUC to develop an Interim Water Shortage Allocation Plan (IWSAP) to determine the allocation of water during a shortage. BAWUA membership consists of 29 agencies, including Brisbane and GVMID, who purchase water from SFPUC. BAWUA's Board of Directors has adopted a resolution that endorses the IWSAP and recommends that member agencies adopt the Plan. All member agencies must approve the Plan on or before July 31, 2001 in order for the IWSAP to be implemented. Presently, 25 of the 29 member agencies have adopted the Plan.

The IWSAP consists of two tiers: a method for allocating water between SFPUC and the Suburban Purchasers (BAWUA member agencies) – "Tier One" Plan, and a method for allocating water among the Suburban Purchasers – "Tier Two" Plan. The IWSAP would be implemented whenever SFPUC determines that anticipated water supply during the upcoming July 1 – June 30 water year will be up to 20% less than projected purchases. In this case, allocation of water between SFPUC

and the Suburban Purchasers will be made according to "Tier One" (see Attachment C) as shown in the table below:

Projected Shortage	SFPUC Share	Suburban Purchasers Share
5%	35.5%	64.5%
10%	36.0%	64.0%
15%	37.0%	63.0%
20%	37.5%	62.5%

The allocation of water among the Suburban Purchasers will then be determined by the three component formula described in "Tier Two" (see Attachment D). The first two components of the formula are fixed allocation amounts (e.g., one is the greater of the assured water supply under the Master Contract or the average purchases in FY 96-97 through FY 98-99, and the second is fixed as the average usage during FY 96-97 through FY 98-99), and the third component is calculated as the rolling average of the three years just prior to the declared shortage. The three components are used to calculate an "Adjusted Shortage Allocation" as shown in the table below for each Suburban Purchaser.

	Component One	Component Two	Component Three	Average	FY 98-99 Purchases	Adjusted Shortage Allocation
Brisbane	0.46	0.30	0.30	0.35	0.34	0.26
GVMID	0.52	0.27	0.27	0.35	0.28	0.26

These calculations based on FY 98-99 purchases.
Units in million gallons per day unless noted as a percentage.

The advantages of the IWSAP are that the majority of the allocations are fixed and therefore allows agencies to prepare realistic contingency plans; the allocations are calculated in a straightforward and consistent manner; and the allocations allow for change in land use. Additionally, the IWSAP allows both banking of water saved during a shortage and transfers of banked or allocated water between suburban agencies. Excess use charges can be incurred monthly, but they are calculated annually, allowing water saved in one month to be used to offset excess use in another month.

FISCAL IMPACT/FINANCING ISSUES:

Potential costs in the form of excess use charges could be incurred if water consumption during a declared shortage was in excess of allocation. Potential savings as a result of transfers to another suburban agency could be gained if water use is less than the allocation. There is also the opportunity to transfer water between the City of Brisbane and GVMID during a shortage, thereby potentially eliminating the likelihood of paying excess use charges.

R J Breault
Director of Public Works/City Engineer

City Manager

Attachment A: City of Brisbane Resolution approving BAWUA IWSAP
Attachment B: GVMID Resolution approving BAWUA IWSAP
Attachment C: Interim Water Shortage Allocation Plan
Attachment D: Interim Water Shortage Allocation Plan Among Suburban Purchasers
Attachment E: Personal Communication, Ms. Sandkulla (BAWUA) to Mr. Breault
Attachment F: IWSAP Frequently Asked Questions
Attachment G: Excerpts from IWSAP PowerPoint presentation ("Overview")

RESOLUTION 2001-48

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE APPROVING THE BAY AREA WATER USERS ASSOCIATION INTERIM WATER SHORTAGE ALLOCATION PLAN AND THE INTERIM WATER SHORTAGE ALLOCATION PLAN AMONG SUBURBAN PURCHASERS

WHEREAS, the Bay Area Water Users Association Board of Directors has endorsed Water Shortage Allocation Plans; and

WHEREAS, the City Council finds and determine that adoption of said Plans are in the best interest of the City; and

WHEREAS, the Director of Public Works has recommended approval of the Plans,

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Brisbane that the Interim Water Shortage Allocation Plan and the Interim Water Shortage Allocation Plan Among Suburban Purchasers be, and the same hereby are approved.

W. Clarke Conway

W. Clarke Conway, Mayor

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Brisbane held on 29th day of May, 2001 by the following vote:

AYES: Councilmembers Bologoff, Conway, Panza, Waldo, and Mayor Conway
NOES: None
ABSENT: None

Sheri Marie Schroeder

Sheri Marie Schroeder, City Clerk

INTERIM WATER SHORTAGE ALLOCATION PLAN

This Interim Water Shortage Allocation Plan ("Plan") describes the method for allocating water between the San Francisco Public Utilities Commission ("SFPUC") and the Suburban Purchasers collectively during shortages caused by drought. The Plan implements a method for allocating water among the individual Suburban Purchasers which has been adopted by the Suburban Purchasers. The Plan includes provisions for transfers, banking, and excess use charges. The Plan applies only when the SFPUC determines that a system-wide water shortage due to drought exists, and all references to "shortages" and "water shortages" are to be so understood. This Plan is adopted pursuant to Section 7.03(a) of the 1984 Settlement Agreement and Master Water Sales Contract ("Master Contract").

SECTION 1. SHORTAGE CONDITIONS

1.1. Projected Available SFPUC Water Supply. The SFPUC shall make an annual determination as to whether or not a shortage condition exists. The determination of projected available water supply shall consider, among other things, stored water, projected runoff, water acquired by the SFPUC from non-SFPUC sources, inactive storage, reservoir losses, allowance for carryover storage, and water bank balances, if any, described in Section 3.

1.2 Projected SFPUC Purchases. The SFPUC will utilize purchase data, including volumes of water purchased by the Suburban Purchasers and by Direct City Water Users (as those terms are used in the Master Contract) in the year immediately prior to the drought, along with other available relevant information, as a basis for determining projected system-wide water purchases from the SFPUC for the upcoming year.

1.3. Shortage Conditions. The SFPUC will compare the available water supply (Section 1.1) with projected system-wide water purchases (Section 1.2). A shortage condition exists if the SFPUC determines that the projected available water supply is less than projected system-wide water purchases in the upcoming Supply Year (defined as the period from July 1 through June 30). When a shortage condition exists, SFPUC will determine whether voluntary or mandatory actions will be required to reduce purchases of SFPUC water to required levels.

1.3.1 Voluntary Response. If the SFPUC determines that voluntary actions will be sufficient to accomplish the necessary reduction in water use throughout its service area, the SFPUC and the Suburban Purchasers will make good faith efforts to reduce their water purchases to stay within their annual shortage allocations and associated monthly water use budgets. The SFPUC will not impose excess use charges during periods of voluntary rationing, but may suspend the prospective accumulation of water bank credits, or impose a ceiling on further accumulation of bank credits, consistent with Section 3.2.1 of this Plan.

1.3.2 Mandatory Response. If the SFPUC determines that mandatory actions will be required to accomplish the necessary reduction in water use in the SFPUC service area, the SFPUC may implement excess use charges as set forth in Section 4 of this Plan.

Attachment C

1.4. Period of Shortage. A shortage period commences when the SFPUC determines that a water shortage exists, as set forth in a declaration of water shortage emergency issued by the SFPUC pursuant to California Water Code Sections 350 et seq. Termination of the water shortage emergency will be declared by resolution of the SFPUC.

SECTION 2. SHORTAGE ALLOCATIONS

2.1. Annual Allocations between the SFPUC and the Suburban Purchasers. The annual water supply available during shortages will be allocated between the SFPUC and the collective Suburban Purchasers as follows:

Level of System Wide Reduction in Water Use Required	Share of Available Water	
	SFPUC Share	Suburban Purchasers Share
5% or less	35.5%	64.5%
6% through 10%	36.0%	64.0%
11% through 15%	37.0%	63.0%
16% through 20%	37.5%	62.5%

The water allocated to the SFPUC shall correspond to the total allocation for all Direct City Water Users as defined in Section 4.01 of the Master Contract.

2.2 Annual Allocations among the Suburban Purchasers. The annual water supply allocated to the Suburban Purchasers collectively during system wide shortages of 20 percent or less will be apportioned among them based on a methodology adopted by all of the Suburban Purchasers, which shall supersede the provisions of Section 7.03(b) of the Master Contract, as contemplated in Section 7.03(a) of the Master Contract. In any year for which the methodology must be applied, the Bay Area Water Users Association ("BAWUA") will calculate each Suburban Purchaser's individual percentage share of the amount of water allocated to the Suburban Purchasers collectively pursuant to Section 2.1. Following the declaration or reconfirmation of a water shortage emergency by the SFPUC, BAWUA will deliver to the SFPUC General Manager a list, signed by the President of BAWUA's Board of Directors and its General Manager, showing each Suburban Purchaser together with its percentage share and stating that the list has been prepared in accordance with the methodology adopted by the Suburban Purchasers. The SFPUC shall allocate water to each Suburban Purchaser, as specified in the list. The shortage allocations so established may be transferred as provided in Section 2.5 of this Plan.

The methodology adopted by the Suburban Purchasers utilizes the rolling average of each individual Suburban Purchaser's purchases from the SFPUC during the three immediately preceding Supply Years. The SFPUC agrees to provide BAWUA by November 1 of each year a list showing the amount of water purchased by each Suburban Purchaser during the immediately preceding Supply Year. The list will be prepared using Customer Service Bureau report

MGT440 (or comparable official record in use at the time), adjusted as required for any reporting errors or omissions, and will be transmitted by the SFPUC General Manager or his designee.

2.3. Limited Applicability of Plan to System Wide Shortages Greater Than Twenty Percent. The allocations of water between the SFPUC and the Suburban Purchasers collectively, provided for in Section 2.1, apply only to shortages of 20 percent or less. The SFPUC and Suburban Purchasers recognize the possibility of a drought occurring which could create system-wide shortages greater than 20 percent despite actions taken by the SFPUC aimed at reducing the probability and severity of water shortages in the SFPUC service area. If the SFPUC determines that a system wide water shortage greater than 20 percent exists, the SFPUC and the Suburban Purchasers agree to meet within 10 days and discuss whether a change is required to the allocation set forth in Section 2.1 in order to mitigate undue hardships that might otherwise be experienced by individual Suburban Purchasers or Direct City Water Users. Following these discussions, the water allocation set forth in Section 2.1 of this Plan, or a modified version thereof, may be adopted by mutual written consent of the SFPUC and the Suburban Purchasers. If the SFPUC and Suburban Purchasers meet and cannot agree on an appropriate allocation within 30 days of the SFPUC's determination of water shortage greater than 20 percent, then (1) the provisions of Section 7.03(b) of the Master Contract will apply, unless (2) all of the Suburban Purchasers direct in writing that an allocation methodology agreed to by them be used to apportion the water to be made available to the Suburban Purchasers collectively, in lieu of the provisions of Section 7.03(b).

The provisions of this Plan relating to transfers (in Section 2.5), banking (in Section 3), and excess use charges (in Section 4) shall continue to apply during system-wide shortages greater than 20 percent.

2.4. Monthly Water Budgets. Within 10 days after adopting a declaration of water shortage emergency, the SFPUC will determine the amount of water allocated to the Suburban Purchasers collectively pursuant to Section 2.1. The SFPUC General Manager, using the percentages shown on the list delivered by BAWUA pursuant to Section 2.2, will calculate each Suburban Purchaser's individual annual allocation. The SFPUC General Manager, or his designee, will then provide each Suburban Purchaser with a proposed schedule of monthly water budgets based on the pattern of monthly water purchases during the Supply Year immediately preceding the declaration of shortage (the "Default Schedule"). Each Suburban Purchaser may, within two weeks of receiving its Default Schedule, provide the SFPUC with an alternative monthly water budget that reschedules its annual shortage allocation over the course of the succeeding Supply Year. If a Suburban Purchaser does not deliver an alternative monthly water budget to the SFPUC within two weeks of its receipt of the Default Schedule, then its monthly budget for the ensuing Supply Year shall be the Default Schedule proposed by the SFPUC.

Monthly water budgets will be derived from annual allocations for purposes of accounting for excess use. Monthly water budgets shall be adjusted during the year to account for transfers of shortage allocation under Section 2.5 and transfers of banked water under Section 3.4.

2.5. Transfers of Shortage Allocations. Voluntary transfers of shortage allocations between the SFPUC and any Suburban Purchasers, and between any Suburban Purchasers, will be permitted

using the same procedure as that for transfers of banked water set forth in Section 3.4. The SFPUC and the Bay Area Water Users Association (BAWUA) shall be notified of each transfer. Transfers of shortage allocations shall be deemed to be emergency transfers described in Sections 7.05 and 7.07(a) of the Master Contract and shall become effective on the third business day after notice of the transfer has been delivered to the SFPUC. Transfers of shortage allocations shall be in compliance with Section 7.05 of the Master Contract. The transferring parties will meet with the SFPUC, if requested, to discuss any effect the transfer may have on its operations.

SECTION 3. SHORTAGE WATER BANKING

3.1. Water Bank Accounts. The SFPUC shall create a water bank account for itself and each Suburban Purchaser during shortages in conjunction with its resale customer billing process. Bank accounts will account for amounts of water that are either saved or used in excess of the shortage allocation for each agency; the accounts are not used for tracking billings and payments. When a shortage period is in effect (as defined in Section 1.4), the following provisions for bank credits, debits, and transfers shall be in force. A statement of bank balance for each Suburban Purchaser will be included with the SFPUC's monthly water bills.

3.2. Bank Account Credits. Each month, monthly purchases will be compared to the monthly budget for that month. Any unused shortage allocation by an agency will be credited to that agency's water bank account. Credits will accumulate during the entire shortage period, subject to potential restrictions imposed pursuant to Section 3.2.1. Credits remaining at the end of the shortage period will be zeroed out; no financial or other credit shall be granted for banked water.

3.2.1. Maximum Balances. The SFPUC may suspend the prospective accumulation of credits in all accounts. Alternatively, the SFPUC may impose a ceiling on further accumulation of credits in water bank balances based on a uniform ratio of the bank balance to the annual water allocation. In making a decision to suspend the prospective accumulation of water bank credits, the SFPUC shall consider the available water supply as set forth in Section 1.1 of this Plan and other reasonable, relevant factors.

3.3. Account Debits. Each month, monthly purchases will be compared to the budget for that month. Purchases in excess of monthly budgets will be debited against an agency's water bank account. Bank debits remaining at the end of the fiscal year will be subject to excess use charges (see Section 4).

3.4. Transfers of Banked Water. In addition to the transfers of shortage allocations provided for in Section 2.5, voluntary transfers of banked water will also be permitted between the SFPUC and any Suburban Purchaser, and among the Suburban Purchasers. The volume of transferred water will be credited to the transferee's water bank account and debited against the transferor's water bank account. The transferring parties must notify the SFPUC and BAWUA of each transfer in writing (so that adjustments can be made to bank accounts), and will meet with the SFPUC, if requested, to discuss any affect the transfer may have on SFPUC operations. Transfers of banked water shall be deemed to be emergency transfers described in Sections 7.05 and 7.07(a) of the Master Contract and shall become effective on the third business day after notice of the transfer has been delivered to the SFPUC. If the SFPUC incurs extraordinary costs

in implementing transfers, it will give written notice to the transferring parties within ten (10) business days after receipt of notice of the transfer. Extraordinary costs means additional costs directly attributable to accommodating transfers and which are not incurred in non-drought years nor simply as a result of the shortage condition itself. Extraordinary costs shall be calculated in accordance with the procedures in the Master Contract and shall be subject to the disclosure and auditing requirements in the Master Contract. In the case of transfers between Suburban Purchasers, such extraordinary costs shall be considered to be expenses chargeable solely to individual Suburban Purchasers and shall be borne equally by the parties to the transfer. In the case of transfers between the SFPUC and a Suburban Purchaser, the SFPUC's share of any extraordinary transfer costs shall not be added to the Suburban Revenue Requirement.

3.4.1. Transfer Limitations. The agency transferring banked water will be allowed to transfer no more than the accumulated balance in its bank. Transfers of estimated prospective banked credits and the "overdrafting" of accounts shall not be permitted. The price of transfer water originally derived from the SFPUC system is to be determined by the transferring parties and is not specified herein. Transfers of banked water shall be in compliance with Section 7.05 of the Master Contract.

SECTION 4. WHOLESALE EXCESS USE CHARGES

4.1. Amount of Excess Use Charges. Monthly excess use charges shall be determined by the SFPUC at the time of the declared water shortage consistent with the calendar in Section 6 and in accordance with Section 5.03 of the Master Contract. The excess use charges will be in the form of multipliers applied to the rate in effect at the time the excess use occurs.
The same excess use charge multipliers shall apply to the Suburban Purchasers and all Direct City Water Users. The excess use charge multipliers apply only to the charges for water delivered at the rate in effect at the time the excess use occurred.

4.2 Monitoring Suburban Water Use. During periods of voluntary rationing, water usage greater than a customer's allocation (as determined in Section 2) will be indicated on each SFPUC monthly water bill. During periods of mandatory rationing, monthly and cumulative water usage greater than a Suburban Purchaser's shortage allocation and the associated excess use charges will be indicated on each SFPUC monthly water bill.

4.3. Suburban Excess Use Charge Payments. An annual reconciliation will be made of monthly excess use charges according to the calendar in Section 6. Annual excess use charges will be calculated by comparing total annual purchases for each Suburban Purchaser with its annual shortage allocation (as adjusted for transfers of shortage allocations and banked water, if any). Excess use charge payments by those Suburban Purchasers with net excess use will be paid according to the calendar in Section 6. The SFPUC and the Suburban Purchasers have discussed the possibility of dedicating excess use charges paid by Suburban Purchasers toward the purchase of water from the State Drought Water Bank or other willing sellers in order to provide additional water to the Suburban Purchasers. The parties may continue discussions of this concept in order to develop the accounting and operational details of such a program. However, unless and until the SFPUC and the Suburban Purchasers agree in writing to an amendment of the Plan to implement such a program, excess use charges paid by the Suburban Purchasers constitute "revenues received from the Suburban Purchasers for the sale of water" for purposes

of Section 5.07 of the Master Contract.

SECTION 5. GENERAL PROVISIONS GOVERNING WATER SHORTAGE ALLOCATION PLAN

5.1. Construction of Terms. This Plan is for the sole benefit of the parties and shall not be construed as granting rights to any person other than the parties or imposing obligations on a party to any person other than another party.

5.2. Governing Law. This Plan is made under and shall be governed by the laws of the State of California.

5.3. Effect on Master Contract. This Plan describes the method for allocating water between the SFPUC and the collective Suburban Purchasers during system-wide water shortages of 20 percent or less. This Plan also provides for the SFPUC to allocate water among the Suburban Purchasers in accordance with directions provided by the Suburban Purchasers through BAWUA under Section 2.2, and to implement a program by which such allocations may be voluntarily transferred among the Suburban Purchasers. The provisions of this Plan are intended to implement Section 7.03(a) of the Master Contract and do not affect, change or modify any other section, term or condition of the Master Contract.

5.4. Role of Suburban Advisory Group. Section 8.04 of the Master Contract identifies the Suburban Advisory Group as a forum for ensuring that the Suburban Purchasers are informed of matters affecting the SFPUC water system. Regularly scheduled meetings of the Suburban Advisory Group will be used to ensure that the important information concerning potential water shortages is provided to the Suburban Purchasers for consideration and examination. The parties agree to meet upon request up to two times per month in order to keep the SFPUC and the Suburban Advisory Group (or a subset of that group) informed of the status of the available water supply and measures under consideration to alleviate shortage conditions affecting the SFPUC water system.

5.5. Inapplicability of Plan to Allocation of SFPUC System Water During Non-Shortage Periods and to Water Wheeling. The SFPUC's agreement in this Plan to a respective share of SFPUC system water during years of shortage shall not be construed to provide a basis for the allocation of water between the SFPUC and the Suburban Purchasers when no water shortage emergency exists. Nor shall this Plan provide any precedent for the transfer, banking, determination of available capacity, or rate to be charged for water proposed to be wheeled through the SFPUC system from non-SFPUC sources by any person or entity under Water Code Section 1810 et seq.

5.6. Termination. This Plan shall expire on June 30, 2009. The SFPUC and the Suburban Purchasers can mutually agree to revise or terminate this Plan prior to that date due to changes in the water delivery capability of the SFPUC system, the acquisition of new water supplies, and other factors affecting the availability of water from the SFPUC system during times of shortage.

SECTION 6. ALLOCATION CALENDAR

6.1. Annual Schedule. The annual schedule for the shortage allocation process is shown below. This schedule may be changed by the SFPUC to facilitate implementation.

6.1.1

In All Years	Target Dates
1. SFPUC delivers list of annual purchases by each Suburban Purchaser during the immediately preceding Supply Year	November 1
2. SFPUC meets with the Suburban Advisory Group and presents water supply forecast for the following Supply Year	January 1-30
3. SFPUC issues initial estimate of available water supply	February 1
4. SFPUC announces potential first year of drought (if applicable)	February 1
5. SFPUC and Suburban Advisory Group meet upon request to exchange information concerning water availability and projected system-wide purchases	February 1-May 31
6. SFPUC issues revised estimate of available water supply, and confirms continued potential shortage conditions, if applicable	March 1
7. SFPUC issues final estimate of available water supply	March 15
8. SFPUC determines amount of water available to Suburban Purchasers collectively	March 15

In Drought Years	Target Dates
9. SFPUC formally declares the existence of water shortage emergency (or end of water shortage emergency, if applicable) under Water Code Sections 350 et. seq.	March 15-31
10. SFPUC declares the need for a voluntary or mandatory response	March 15-31
11. BAWUA submits calculation to SFPUC of individual Suburban Purchasers' percentage shares of water allocated to Suburban Purchasers collectively	March 15- 31
12. SFPUC determines individual shortage allocations, based on BAWUA's submittal of individual agency percentage shares to SFPUC, and monthly water budgets (Default Schedule)	March 25—April 10
13. Suburban Purchasers submit alternative monthly water budgets (optional)	April 8-April 24
14. Final drought shortage allocations are issued for the Supply Year beginning July 1 through June 30	May 1
15. Monthly water budgets become effective	July 1
16. Excess use charges indicated on monthly Suburban bills	July 1 (of the beginning year) through June 30 (of the succeeding year)
17. Excess use charges paid by Suburban Purchasers for prior year	July of the succeeding year

INTERIM WATER SHORTAGE ALLOCATION PLAN AMONG SUBURBAN PURCHASERS

This Interim Water Shortage Allocation Plan ("Tier Two Plan") describes the method for allocating the water made available by the San Francisco Public Utilities Commission ("SFPUC"), during shortages caused by drought, among the Suburban Purchasers. This Plan applies only when the SFPUC determines that a system-wide water shortage due to drought exists, and all references to "shortages" and "water shortages" are to be so understood. This Plan is adopted pursuant to Section 7.03(a) of the 1984 Settlement Agreement and Master Water Sales Contract between the City and County of San Francisco and the Suburban Purchasers ("Master Contract").

SECTION 1. APPLICABILITY AND INTEGRATION

Section 1.1 Applicability. This Tier Two Plan applies when, and only when, the SFPUC determines that a system-wide water shortage of 20 percent or less exists, as set forth in a declaration of water shortage emergency adopted by the SFPUC pursuant to California Water Code Sections 350 *et seq.* This Tier Two Plan applies only to water acquired and distributed by the SFPUC to the Suburban Purchasers and has no effect on water obtained by a Suburban Purchaser from any source other than the SFPUC.

Section 1.2 Integration with SFPUC Interim Water Shortage Allocation Plan (Tier One Plan). The SFPUC has adopted an Interim Water Shortage Allocation Plan (Tier One Plan) which, among other things, (a) provides for the allocation by the SFPUC of water between Direct City Water Users (e.g., retail water customers within the City and County of San Francisco) and the Suburban Purchasers collectively during system-wide water shortages of 20 percent or less, (b) contemplates the adoption by the Suburban Purchasers of this Tier Two Plan for allocation of the water made available to Suburban Purchasers collectively among the 29 individual Suburban Purchasers, (c) commits the SFPUC to implement this Tier Two Plan, and (d) provides for the transfer of both "banked" water and shortage allocations between and among the Suburban Purchasers and commits the SFPUC to implement such transfers.

This Tier Two Plan is intended to be integrated with the Tier One Plan described in this Section 1.2. Both Plans becoming operative only if both have been approved by all 29 Suburban Purchasers. Terms used in this Tier Two Plan are intended to have the same meaning as such terms have in the Tier One Plan.

SECTION 2. ALLOCATION OF WATER AMONG SUBURBAN PURCHASERS

Section 2.1 Annual Allocations Among the Suburban Purchasers. The annual water supply allocated by the SFPUC to the Suburban Purchasers collectively during system-wide shortages of 20 percent or less shall be apportioned among them based on the methodology described in this Section 2.

Section 2.2 Methodology for Allocating Water Among Suburban Purchasers. The water made available to the Suburban Purchasers collectively will be allocated among them in

Attachment D

proportion to each Suburban Purchaser's allocation factor, adjusted as described in Section 2.2.4 below.

Section 2.2.1 Step One: Determination of Allocation Basis for Each Suburban Purchaser. Each Suburban Purchaser's Allocation Basis is an amount, expressed in millions of gallons per day (mgd), which in turn is the arithmetic average of three components. Two of these components are fixed as of the date this Tier Two Plan is adopted; the third component is variable and will be determined when a shortage has been declared by the SFPUC.

The first component is (i) the greater of a Suburban Purchaser's Supply Assurance provided for in the Master Contract or its average purchases from SFPUC during three fiscal years 1996-97, 1997-98, and 1998-99, or (ii) in the case of Hayward and Estero Municipal Improvement District, their projected purchases from SFPUC in FY 2010-11 as reported in the 1998-99 Annual Survey published by BAWUA, or (iii) in the case of San Jose and Santa Clara, the limits on purchases from SFPUC set forth on Exhibit M to the Master Contract. The amount of this first component for each Suburban Purchaser is shown on Attachment A-1.

The second component is the average of each Suburban Purchaser's purchases from SFPUC during the fiscal years 1996-97, 1997-98, and 1998-99. The amount of this second component for each Suburban Purchaser is shown on Attachment A-2.

The third component is the average of each Suburban Purchaser's purchases from SFPUC during the three fiscal years immediately preceding the declaration of water shortage emergency by the SFPUC.

Section 2.2.2 Step Two: Determination of Allocation Factor for Each Suburban Purchaser. Each Suburban Purchaser's Allocation Factor is a percentage derived from a fraction, the numerator of which is the particular Suburban Purchaser's Allocation Basis (in mgd) as calculated in Step One and the denominator of which is the sum (in mgd) of all Suburban Purchasers' Allocation Bases.

Section 2.2.3 Step Three: Determination of Initial Shortage Allocation for Each Suburban Purchaser. The initial shortage allocation for each Suburban Purchaser is determined by multiplying the amount of water available to the Suburban Purchasers collectively (determined pursuant to Section 2.1 of the Tier One Plan) by the Suburban Purchaser's Allocation Factor (i.e., the percentage calculated pursuant to Section 2.2.2).

Section 2.2.4 Step Four: Determination of Final Shortage Allocation for Each Suburban Purchaser. Once the initial shortage allocations are determined, the percentage reductions from each Suburban Purchaser's purchases from the SFPUC in the fiscal year immediately preceding the declaration of water shortage emergency will be calculated as a fraction, the numerator of which is the Suburban Purchaser's initial shortage allocation (determined pursuant to Section 2.2.3), and the denominator of which is the amount purchased from the SFPUC during such fiscal year. The result, as a percentage carried to two places to the right of the decimal, will be subtracted from 100%; the result is the Suburban Purchaser's percentage reduction.

The percentage reductions for San Jose and Santa Clara will be compared to the highest percentage reduction of the other Suburban Purchasers. If both San Jose's and Santa Clara's percentage reduction is larger than the highest percentage reduction among other Suburban Purchasers, the initial shortage allocations established under Section 2.2.3 will become the final

shortage allocations. If either San Jose's percentage reduction or Santa Clara's percentage reduction, or both, is smaller than the highest percentage reduction of other Suburban Purchasers, the shortage allocation (in mgd) of San Jose or Santa Clara, or both, will be reduced so that the percentage reduction of each is no smaller than that of the otherwise highest percentage reduction.

The amount of shortage allocation (in mgd) removed from San Jose and/or Santa Clara will be reallocated among the remaining Suburban Purchasers in proportion to the initial shortage allocation of each calculated as a fraction the numerator of which is the individual initial shortage allocation and the denominator of which is the sum of the initial shortage allocation for the remaining Suburban Purchasers (not including San Jose and Santa Clara).

After such reallocation, the resulting amounts will be the final shortage allocation for each Suburban Purchaser.

Section 2.2.5 Example Calculation. Attachment A-3 presents a sample of the calculations involved in Steps One through Four, using the values from Attachments A-1 and A-2 and recent water use data for the other values. It is presented for illustrative purposes only and does not supersede the foregoing provisions of this Section 2.2. In the event of any inconsistency between this Section 2.2 and Attachment A-3, the text of this section will govern.

Section 2.3 Calculation of Individual Suburban Purchaser's Allocations: Directions to SFPUC. The Tier One Plan contemplates that in any year in which the methodology described above must be applied, the Bay Area Water Users Association ("BAWUA") will calculate each Suburban Purchaser's individual percentage share of the amount of water made available to the Suburban Purchasers collectively, following the methodology described above. The Tier One Plan requires SFPUC to allocate water to each Suburban Purchaser in accordance with calculations delivered to it by BAWUA.

The Tier One Plan requires that each year, the SFPUC will provide to BAWUA by November 1 a list showing the amount of water purchased by each Suburban Purchaser during the immediately preceding Supply Year. The list will be prepared using Customer Service Bureau report MGT 440 (or comparable official record in use at the time), adjusted as required for any reporting errors or omissions, and will be signed by the SFPUC General Manager.

Each Suburban Purchaser authorizes BAWUA to perform the calculations required, using water sales data furnished to it by the General Manager of the SFPUC, and to deliver a list of individual Suburban Purchasers' percentage shares so calculated to SFPUC as contemplated by the SFPUC Plan. Neither BAWUA nor any officer or employee of BAWUA shall be liable to any Suburban Purchaser for any such calculations made in good faith, even if incorrect.

SECTION 3. GENERAL PROVISIONS

Section 3.1 Construction of Terms. This Tier Two Plan is for the sole benefit of the parties and shall not be construed as granting rights to any person other than the parties or imposing obligations on a party to any person other than another party.

Section 3.2 Governing Law. This Tier Two Plan is made under and shall be governed by the laws of the State of California.

Section 3.3 Effect on Master Contract. This Tier Two Plan describes the method for allocating water from the SFPUC among the Suburban Purchasers during system-wide water shortages of 20 percent or less declared by the SFPUC. The provisions of this Tier Two Plan, and the Tier One Plan with which it is intended to be integrated, are intended to implement Section 7.03(a) of the Master Contract. Both the Tier One and Tier Two Plans constitute the water conservation plan contemplated by Section 7.03(a) and supersede the provisions of Section 7.03(b). The Plans do not affect, change or modify any other section, term or condition of the Master Contract.

Section 3.4 Amendment. This Tier Two Plan may be amended only by written agreement of all Suburban Purchasers.

Section 3.5 Termination. This Tier Two Plan shall expire on June 30, 2009. It may be terminated prior to that date only by the written agreement of all Suburban Purchasers.

ATTACHMENT A-1

The amount of the first component for each Suburban Purchaser is shown below.

Suburban Purchasers	First Fixed Component (mgd)
ACWD	13.76
Belmont	3.89
Brisbane	0.46
Burlingame	5.23
Coastside	2.18
Cordilleras	0.01
CWS Total	35.39
Daly City	4.49
East Palo Alto	2.18
Estero	7.23
Guadalupe	0.52
Hayward	24.00
Hillsborough	4.09
Los Trancos	0.11
Menlo Park	4.24
Millbrae	3.15
Milpitas	9.23
Mountain View	13.46
North Coast	3.84
Palo Alto	17.07
Purissima Hills	1.85
Redwood City	10.93
San Bruno	3.25
Skyline	0.18
Stanford	3.03
Sunnyvale	12.58
Westborough	1.32
San José	2.68
Santa Clara	6.57

ATTACHMENT A-2

The amount of the second component for each Suburban Purchaser is shown below.

Suburban Purchasers	Second Fixed Component (mgd)
ACWD	11.95
Belmont	3.26
Brisbane	0.30
Burlingame	4.68
Coastside	1.35
Cordilleras	0.01
CWS Total	33.42
Daly City	4.49
East Palo Alto	2.10
Estero	5.45
Guadalupe	0.27
Hayward	17.56
Hillsborough	3.60
Los Trancos	0.10
Menlo Park	3.43
Millbrae	2.64
Milpitas	6.80
Mountain View	10.36
North Coast	3.29
Palo Alto	12.96
Purissima Hills	1.85
Redwood City	10.92
San Bruno	2.01
Skyline	0.16
Stanford	2.58
Sunnyvale	10.73
Westborough	0.98
San José	4.10
Santa Clara	4.72

ATTACHMENT A-3

Sample Calculation

Attachment A-3 Sample Calculation

23.6% Average Suburban Reduction from FY 98-99 Purchases

(Units in million gallons per day unless otherwise noted)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Allocation Basis				Unadjusted Allocations					Allocations Adj. for Santa Clara & San José			
Suburban Purchasers	First Fixed Component	Second Fixed Component	Variable Component	Average	Initial Allocation Factors	Initial Shortage Allocation	FY 98-99 Purchases	Initial Purchase Cutback		Subtotal Allocation Factors	Adjusted Shortage Allocation	Adjusted Purchase Cutback		Final Individual Share
ACWD	13.76	11.95	11.95	12.55	7.12%	9.16	11.96	-2.80	-23.41%	7.50%	9.18	-2.78	-23.23%	7.13%
Belmont	3.89	3.26	3.26	3.47	1.97%	2.53	3.35	-0.81	-24.25%	2.07%	2.54	-0.81	-24.08%	1.97%
Brisbane	0.46	0.30	0.30	0.35	0.20%	0.26	0.34	-0.08	-23.61%	0.21%	0.26	-0.08	-23.43%	0.20%
Burlingame	5.23	4.68	4.68	4.86	2.76%	3.55	4.65	-1.10	-23.57%	2.91%	3.56	-1.09	-23.40%	2.76%
Coastside	2.18	1.35	1.35	1.62	0.92%	1.19	1.48	-0.29	-19.74%	0.97%	1.19	-0.29	-19.56%	0.92%
Cordilleras	0.01	0.01	0.01	0.01	0.00%	0.00	0.01	0.00	-25.89%	0.00%	0.00	0.00	-25.72%	0.00%
CWS Total	35.39	33.42	33.42	34.07	19.32%	24.87	33.45	-8.58	-25.64%	20.36%	24.93	-8.52	-25.48%	19.37%
Daly City	4.49	4.49	4.49	4.49	2.55%	3.28	4.55	-1.27	-27.85%	2.69%	3.29	-1.26	-27.68%	2.55%
East Palo Alto	2.18	2.10	2.10	2.13	1.21%	1.55	2.07	-0.52	-25.13%	1.27%	1.55	-0.52	-24.96%	1.21%
Estero	7.23	5.45	5.45	6.05	3.43%	4.41	5.57	-1.15	-20.73%	3.61%	4.42	-1.14	-20.55%	3.44%
Guadalupe	0.52	0.27	0.27	0.35	0.20%	0.26	0.28	-0.02	-7.39%	0.21%	0.26	-0.02	-7.18%	0.20%
Hayward	24.00	17.56	17.56	19.71	11.18%	14.39	17.77	-3.38	-19.04%	11.77%	14.42	-3.35	-18.86%	11.20%
Hillsborough	4.09	3.60	3.60	3.76	2.13%	2.75	3.39	-0.64	-18.83%	2.25%	2.75	-0.63	-18.65%	2.14%
Los Trancos	0.11	0.10	0.10	0.10	0.06%	0.07	0.10	-0.03	-26.93%	0.06%	0.07	-0.03	-26.77%	0.06%
Menlo Park	4.24	3.43	3.43	3.70	2.10%	2.70	3.39	-0.69	-20.45%	2.21%	2.71	-0.69	-20.27%	2.10%
Millbrae	3.15	2.64	2.64	2.81	1.59%	2.05	2.63	-0.58	-21.91%	1.68%	2.06	-0.57	-21.74%	1.60%
Milpitas	9.23	6.80	6.80	7.61	4.31%	5.55	6.80	-1.24	-18.29%	4.55%	5.57	-1.23	-18.11%	4.32%
Mountain View	13.46	10.36	10.36	11.40	6.46%	8.32	10.25	-1.93	-18.81%	6.81%	8.34	-1.91	-18.62%	6.48%
North Coast	3.84	3.29	3.29	3.47	1.97%	2.54	3.34	-0.80	-24.02%	2.07%	2.54	-0.80	-23.85%	1.97%
Palo Alto	17.07	12.96	12.96	14.33	8.13%	10.46	13.04	-2.58	-19.78%	8.56%	10.49	-2.56	-19.60%	8.15%
Purissima Hills	1.85	1.85	1.85	1.85	1.05%	1.35	1.93	-0.59	-30.37%	1.10%	1.35	-0.58	-30.21%	1.05%
Redwood City	10.93	10.92	10.92	10.92	6.19%	7.97	11.42	-3.45	-30.19%	6.52%	7.99	-3.43	-30.03%	6.21%
San Bruno	3.25	2.01	2.01	2.42	1.37%	1.77	2.47	-0.71	-28.54%	1.45%	1.77	-0.70	-28.38%	1.37%
Skyline	0.18	0.16	0.16	0.17	0.09%	0.12	0.16	-0.04	-24.69%	0.10%	0.12	-0.04	-24.52%	0.10%
Stanford	3.03	2.58	2.58	2.73	1.55%	1.99	2.56	-0.57	-22.23%	1.63%	2.00	-0.57	-22.06%	1.55%
Sunnyvale	12.58	10.73	10.73	11.34	6.43%	8.28	11.22	-2.94	-26.19%	6.78%	8.30	-2.92	-26.02%	6.45%
Westborough	1.32	0.98	0.98	1.09	0.62%	0.80	1.00	-0.20	-20.27%	0.65%	0.80	-0.20	-20.09%	0.62%
Subtotal	187.67	157.23	157.23	167.38		122.19	159.17	-36.98	-23.24%	100.00%	122.47	-36.71	-23.06%	
San José	2.68	4.10	4.10	3.63	2.06%	2.65	4.13	-1.48	-35.85%		2.65	-1.48	-35.85%	2.06%
Santa Clara	6.57	4.72	4.72	5.34	3.03%	3.90	5.20	-1.30	-25.04%		3.62	-1.58	-30.37%	2.81%
Total	196.92	166.06	166.06	176.35	100.00%	128.73	168.50	-39.77	-23.60%		128.73	-39.77	-23.60%	100.00%

Derivation of the Santa Clara/San José adjustment:

1.	Largest permanent customer cutback:	-30.37%
2a.	Adjusted Santa Clara shortage allocation:	3.62 (Applying largest permanent customer cutback)
2b.	Santa Clara adjustment:	-0.28 (Difference between initial and adjusted alloc.)
3a.	Adjusted San José shortage allocation:	2.87 (Applying largest permanent customer cutback)
3b.	San José adjustment:	0.00 (Difference between initial and adjusted alloc.)
4.	Total Adjustment:	-0.28 (2b + 3b)

Attachment A-3. Suburban Shortage Allocations

Assumptions and Column Notes

23.6% shortage for the Suburban Purchasers compared to FY 1998-99 purchases.

Column notes:

Allocation Basis. The Allocation Basis is used for calculating Allocation Factors and is the average of the following three components:

1. First Fixed Component: The greater of either the Supply Assurance values or the three-year average of SFPUC purchases for FYs 1996-97, 1997-98, and 1998-99, with certain exceptions.
   a. Daly City's and Purissima Hill's values are based on their three-year averages, which is greater than their Supply Assurance values.
   b. Hayward's and Estero's values are based on their 2010-11 projected purchases, as reported in the BAWUA 1997-98 Annual Survey.
   c. San José's and Santa Clara's values are based on the water supply caps in their individual water supply contracts with the SFPUC.
2. Second Fixed Component: The average of SFPUC purchases for FYs 1996-97, 1997-98, and 1998-99.
3. Variable Component: The rolling three-year average, updated annually, beginning with FYs 1996-97, 1997-98, and 1998-99.
4. Average: The average of columns 1, 2, and 3.

Unadjusted Allocations. The initial shortage allocations in column 6 are adjusted for Santa Clara and San José in columns 10 through 13.

5. Allocation Factors: The ratio of each Suburban Purchaser's column 4 average to the column 4 total.
6. Initial Shortage Allocation: The product of each Suburban Purchaser's column 5 Allocation Factor times the column 6 total, which represents the assumed available water supply.
7. FY 1998-99 Purchases: The most recent year's purchases to which the Shortage Allocation can be compared to determine the effective cutback.
8. Purchase Cutback: Column 6 minus column 7, in mgd.
9. Purchase Cutback: The ratio of column 8 to column 7, in percent.

Allocations Adjusted for Santa Clara and San José. This adjustment is made so that Santa Clara's and San José's cutbacks are at least as great as the highest cutback by the permanent customers. In this example, there is no adjustment required for San José because the formula results in an unadjusted cutback that is already greater than the highest cutback by a permanent customer.

10. Subtotal Allocation Factors: The ratio of each permanent Suburban Purchaser's column 4 average to the column 4 subtotal.
11. Adjusted Shortage Allocation: The product of each Suburban Purchaser's column 10 Subtotal Allocation Factor times the Column 11 subtotal.
    a. The column 11 subtotal is the sum of the column 6 subtotal plus the Santa Clara adjustment, 0.26.
    b. The Santa Clara adjustment is the difference between its column 6 Initial Shortage Allocation, 3.72, and its Adjusted Shortage Allocation, 3.48.
    c. Santa Clara's Adjusted Shortage Allocation is the product of its column 4 average and the largest Purchase Cutback, 33.53%, received by the permanent Suburban Purchasers.
12. Adjusted Purchase Cutback: Column 11 minus column 7, in mgd.
13. Adjusted Purchase Cutback: The ratio of column 12 to column 7, in percent.

SAN FRANCISCO BAY AREA WATER USERS ASSOCIATION
Founded 1958
155 BOVET ROAD, SUITE 302 SAN MATEO, CALIFORNIA 94402
PHONE (650) 349-3000 FAX (650) 349-8395

May 15, 2001

Mr. Randy Breault
Director of Public Works
City of Brisbane
50 Park Lane
Brisbane, CA 94005

SUBJECT: Adoption Status of Interim Water Shortage Allocation Plan

Dear Mr. Breault:

Welcome as the new BAWUA representative for the City of Brisbane and Guadalupe Valley Municipal Improvement District (GVMID). I look forward to working with you in the future.

I am pleased to report that, to date the Interim Water Shortage Plan (IWSAP) has been passed by over 79% of the governing bodies of the BAWUA member agencies. The IWSAP is calendared for adoption by 3 additional BAWUA agencies over the next 7 days, bringing the expected adoption total to 26 agencies (89.6%) by the end of next week. At that point, the only members that will have not yet adopted the IWSAP will be the City of Brisbane, GVMID, and East Palo Alto.

The IWSAP represents a significant step for BAWUA Members in planning for future water shortages and removing disincentives for long-term conservation efforts. Because the IWSAP is an implementation of a section of the existing Master Contract between SFPUC and its Suburban Purchasers, it must be adopted by the governing bodies of all 29 BAWUA Members by July 31, 2001, for it to be enacted. The IWSAP will fail if any single BAWUA agency does not adopt the plan by the set date.

I hope that you will bring the IWSAP forward for consideration by your governing body (on behalf of both entities-the city and the improvement district) as soon as possible. Please call me at (650) 349-3000 if I can be of further assistance. I would be pleased to present this plan to your Council if you feel that would be appropriate or useful.

Sincerely,

Nicole M. Sandkulla, P. E.
Water Resources Analyst

CC: Ray McDevitt, Hanson Bridgett
Chron

Attachment E

The Interim Water Shortage Allocation Plan (IWSAP)
Frequently Asked Questions (FAQ's)

No.	Subject	Question	Answer/Response
1	General - IWSAP	What is the IWSAP?	Interim Water Shortage Allocation Plan - This plan describes the method for allocating water (1) between the SFPUC and the collective Suburban Purchasers and (2) among the Suburban Purchasers during shortages due to drought, including provisions for transfers, banking and excess use charges.
2	General - IWSAP	What are the key benefits of the IWSAP?	By clarifying how drought supplies will be allocated between SFPUC and BAWUA, as a whole, and among the BAWUA agencies, the IWSAP provides a better basis for the BAWUA agencies to plan and manage their use of the limited SFPUC supplies. By having a drought allocation method that is 2/3 based on a fixed value, the IWSAP enourcages the development of conservation and reclamation projects and alternatives supplies by the BAWUA agencies. The IWSAP also permits banking of water during droughts and allows for the development of a water transfers market among the BAWUA agencies during shortages.
3	General - IWSAP	How is the IWSAP different from the current method of allocations?	It is unclear how water would be allocated under the current situation if a drought occurred. During the last drought, SFPUC imposed shortage allocations based upon the 10/60 "Inside/Outside" formula. Alternatively, Section 7.03(b) of the Master Contract states: *"In the event...there is not available in the SFWD and HHWPD water system sufficient water to supply the requirement of the suburban purchasers and the direct City water users, each suburban purchaser shall receive no more than that quantity of water which bears the same ratio to the total quantity of water then available in the City's water system, as the amount delivered to the suburban purchasers in the last preceding calendar year prior to the condition of shortage.."* The IWSAP will determine how water will be allocated between SFPUC and the BAWUA agencies and among the BAWUA agencies during a drought. Currently the allocation of dry year supplies is based on prior year usage. The IWSAP will provide a shortage allocation based on 3 components. The values of 2 of the components are fixed at the time of Plan adoption and the value of one component is variable over the life o
4	General - IWSAP	What is the contractual basis for the IWSAP?	Section 7.03(a) of the Master Contract envisioned the development of a "water conservation plan" which would allocate water between the City and the Suburban Purchasers in times of shortage. The IWSAP is intended to fulfill some of the needs contemplated in Section 7.03(a).
5	General - IWSAP	Will the IWSAP be updated periodically to incorporate new information?	The IWSAP itself has a limited shelf life and will only be in force for an interim period until the expiration of the Master Sales Agreement with the SFPUC (June 2009). The IWSAP allocation formula is fixed; however the allocation method incorporated into the IWSAP does accommodate changes in the supply needs of the BAWUA customers. Specifically, 1/3 of the formula for allocating water uses the most recent "pre-drought" purchases from SFPUC and therefore does incorporate future water consumption.

Novewmber 21, 2000

Attachment F

The Interim Water Shortage Allocation Plan (IWSAP)
Frequently Asked Questions (FAQ's)

No.	Subject	Question	Answer/Response
6	General - IWSAP	At what level of SFPUC system-wide shortage will the IWSAP be implemented?	The IWSAP will be implemented whenever a system-wide shortage is declared by SFPUC. The water allocation methods described in the IWSAP apply only to system-wide shortages upto 20 percent.
7	Alternative Allocation Methods - Economic Impact	Why not use a method that is based on the economic impact of reductions on each customer?	Historically, determining end-user economic impacts has been problematic for a variety of reasons, including, industry withholding proprietary information, sheer volume of information to be collected and the analysis of information collected. Additionally, such a method would be inappropriate at the wholesale level because for the SFPUC service area, there currently is no authority entrusted to any representative regional body.
8	Alternative Allocation Methods - Historic Use Allocation	Some agencies would be better off with the formula SFPUC used last drought, which is based on previous year's water usage. Why not use this type of method?	Drought allocations that are based solely on water purchases just prior to a drought encourage agencies to maximize their water purchases in every year to ensure greater drought allocations. Therefore, drought allocations based on last year's water purchases conflict with the goal of encouraging water conservation in every year. Water is a precious commodity in our area and a scarce resource in all years, not just during droughts. Therefore, it is in everyone's best interest to encourage conservation of water at all times.
9	Alternative Allocation Methods - Per Capita	Why isn't the water allocated on a per capita basis or why not allocate the same amount to each house? Wouldn't that be most equitable?	No single method of allocation will be considered equitable by all agencies. At the wholesale level, the IWSAP is a fair and reasonable allocation method which permits local agencies to allocate water among their retail customers as best suits their service area. Each BAWUA agency has the ability and authority to implement a drought plan for its customers in any way that it feels is most responsible and effective for its agency.
10	Alternative Supplies	What credit do we get for all of the conservation measures (recycled water) or alternate supplies (local surface water) that we have had in place since for the past several years?	No specific credits are provided to agencies for past conservation except through the difference between their current purchases and their Supply Assurance values. Agencies elected to take those past actions with, at best, an expectation that future drought allocation would be administered the same as during the last drought. The proposed allocation plan provides better protection for past efforts than the previous allocation method and protects future investments in conservation and recycled water. If nothing is changed, agencies will continue to not receive the full benefit (meaning any increase in drought water allocations) from their conservation measures in dry years. By adopting any IWSAP that utilizes fixed values (which the proposed IWSAP does), agencies are assured of receiving some benefit from their conservation practices in future droughts.

The Interim Water Shortage Allocation Plan (IWSAP)
Frequently Asked Questions (FAQ's)

No.	Subject	Question	Answer/Response
11	Alternative Supplies	Aren't agencies that have not invested in additional water sources (conservation, alternate water supplies) as aggressively as our agency taking advantage of our water supply investments?	Under prior rationing plans, yes, that possibility exists unless something like the IWSAP is implemented. The existing system of allocating water in dry periods (based on immediate historical purchases) does reallocate some of the benefits from those agencies that have invested to other agencies that may not be investing as much (or at all). The proposed allocation method mitigates the reallocation of agency water supply investments. By having 2/3 of the allocation formula based on fixed values, the recommended IWSAP will greatly reduce this "reallocation" of benefits from one user to another.
12	Alternative Supplies	We're going to recycle water, and I want to know that this plan does not harm our investment.	The proposed method protects local investments better than the previously used method and better than other alternatives considered. If an agency implements a project that reduces its purchases from San Francisco every year (conservation, reclamation, groundwater, surface water), it is providing a benefit to the remaining BAWUA agencies each year by increasing the available San Francisco water to everyone. During dry years, when San Francisco supplies are reduced, all agencies will have their available San Francisco purchases reduced based on the IWSAP allocation method. The difference is that those agencies that have implemented programs to reduce their dependence on San Francisco may now have alternative supplemental water supplies available to them. In dry periods, these alternate supplemental supplies may augment the agency's SFPUC supplies and may reduce the impacts of the drought cutbacks on that agency.
13	Banking	Does the IWSAP allow for banking of unused water allocations?	Yes, agencies can bank water for future use or transfers.
14	Banking	When would bank accounts start?	Bank accounts will start when monthly shortage allocation targets become effective on July 1.
15	Banking	Will there be a ceiling on the amount of water agencies can bank?	The Plan allows SFPUC to suspend the prospective accumulation of credits in all account or identify a "bank" ceiling to ensure that balances do not become "excessive."
16	Banking	What is "excessive" banking?	"Excessive" banking is the term applied to drought bank balances that are large enough to cause significant impact on the amount of water available from the SFPUC water system. A specific volume is not defined at this time, but rather the IWSAP recognizes the possibility for large bank balances to occur and identifies a process to address this potential problem.

The Interim Water Shortage Allocation Plan (IWSAP)
Frequently Asked Questions (FAQ's)

No.	Subject	Question	Answer/Response
17	Banking	Why would the SFPUC suspend water banking? Will SFPUC take away water previously banked as part of a banking suspension?	The IWSAP allows for bank balances to be carried over from one year to the next during an extended drought. If, for some reason, water use by one or more BAWUA members were well within allocations for an extended period of time, there is a potential for these agencies to accrue "excessive" bank balances. In effect, the available water saved and stored in the reservoirs would be "owned" by those agencies. This water would then be unavailable for delivery to others should the drought worsen. A reasonable cap on bank balances prevents this problem, while providing some tangible measure of certainty to agencies that they will not be penalized for good practices. Once water has been banked, that water remains available to the individual agency during the drought. If necessary, SFPUC can suspent the accumulation of more water but each agency will still be able to withdraw already banked water from its account.
18	Differences in Allocations	Why are there differences between percentage cutbacks between agencies? Why should my agency approve an allocation formula that impacts agencies differently?	Consistent with the goals of the IWSAP, differences in cutback percentages reflect differences in land use, climate, and other characteristics of the areas served while at the same time minimizing, to the extent possible, the range of cutback differences among the BAWUA agencies. These differences are similar to the differences in percentage cutbacks seen between agencies during the last drought. Additionally, over time, the differences in cutbacks applied to agencies will reflect the changes implemented by an agency to reduce their purchases from the SFPUC. The proposed method protects local investments better than the existing method and better than other alternatives considered. If an agency implements a project that reduces its purchases from San Francisco every year (conservation, reclamation, groundwater, surface water), that agency is providing a benefit to the remaining BAWUA agencies each year by increasing the available San Francisco water to everyone. During dry years, when San Francisco supplies are reduced, all agencies will have their available San Francisco purchases reduced based on the IWSAP allocation method. The differen implemented programs to reduce their dependence on San Francisco will receive some benefit (in the form o less reduction) for their investment. Going forward, the IWSAP creates an important incentive for all agnecie to invest in alternative supplies and conservation. All agencies will benefit by these incentives.
19	Excess Water Usage	Will there be excess use charges?	Yes, excess use charges will be the same as they were during the last drought. See Section 4 of the IWSAP for more specifics.
20	Excess Water Usage	Who will monitor excess use charges?	SFPUC will monitor monthly use and notify each agency of its relationship to monthly targets/yearly allocations via SFPUC invoice. Agencies will pay their excess use charges at the end of each year. See Section 6 of the IWSAP for more information.

The Interim Water Shortage Allocation Plan (IWSAP)
Frequently Asked Questions (FAQ's)

No.	Subject	Question	Answer/Response
21	Excess Water Usage	How will the excess use charges be applied?	The excess use charges will be applied the same way as during the last drought. Water usage within an agency's allocation will be charged at the normal rate and the increment of water used over the allocation will be charged at the associated increased block rate.
22	Excess Water Usage	What happens to excess use charges paid by Suburban Purchasers? Won't this money be returned to Suburban Purchasers?	Excess use charges that are collected by SFPUC during a drought are considered "revenues received from the Suburban Purchasers for the sale of water" and applied towards the Balancing Account consistent with the Master Contract. This money is then applied to rates in the following year and is therefore returned to the BAWUA agencies as an offset to the following year's rate requirement.
23	Impact on Industry	We have commercial and industrial customers that can't reduce their water use without affecting production or employment.	Each agency will have to make decisions about how its water allocation allocated between its customers. The IWSAP provides a means to fairly allocate the available water supply among BAWUA agencies. The IWSAP does not address how water will be allocated within each community. Water transfers will be helpful for those agencies requiring more water.
24	Shortage Condition	How is a "shortage condition" determined?	SFPUC determines a "shortage condition" exists when projected available water supply is less than projected system-wide water purchases.
25	Shortage Condition	How is projected available water supply determined?	SFPUC shall consider stored water, projected runoff, water acquired by SFPUC, inactive storage reservoir losses, carryover storage allowances, and water bank balances in determining projected available water supply.
26	Special Cases	Why did Hayward and Estero get special treatment and what is that special treatment?	Under the current Master Contract, these agencies are not limited by the Supply Assurance. Unlike the other BAWUA agencies, they do not have a "fixed" Supply Assurance value. The Plan could not move forward without these agencies being included. The Water Supply Committee recommended including these agencies in the Plan in a manner that seemed fair to all parties involved. For Hayward and Estero, projected 2010 demands were used as a surrogate for Supply Assurance values in the calculation of the shortage allocation. With these surrogate values included in the allocation formula, shortage allocations for Hayward and Estero are calculated using the exact same method as other BAWUA agencies.
27	Special Cases	How are San Jose and Santa Clara addressed, since that they have interruptible contracts and no Supply Assurance value?	The individual contract maximums are used as a surrogate for Supply Assurance values in the calculation of the shortage allocation for San Jose and Santa Clara. Additionally, adjustments will be made to ensure that Santa Clara's and San Jose's cutback are at least as great as the highest cutback by the permanent customers.

The Interim Water Shortage Allocation Plan (IWSAP)
Frequently Asked Questions (FAQ's)

No.	Subject	Question	Answer/Response
28	Supply Assurance	How does the IWSAP relate to the Supply Assurance values?	The Supply Assurance values are identified as part of Section 7.02 of the Master Contract and represent both a total amount of water available to the Suburban Purchasers and a distribution of that total amongst the Suburban Purchasers during normal circumstances. The Supply Assurance values do not represent any type of drought allocation or guarentee of water during shortages from San Francisco. The Supply Assurance values will not be affected by the IWSAP
29	Transfers	Are transfers allowed within the IWSAP?	Yes, transfers of individual shortage allocations and banked water are allowed.
30	Transfers	Why do agencies need to notify the SFPUC of transfers of shortage allocation and banked water?	SFPUC is the owner and operator of the distribution system and needs to maintain control and troubleshoot potential problems. Transfers are new to all parties involved and as such, SFPUC should be notified of transfers.
31	Transfers	The Plan mentions paying extraordinary costs to SFPUC for water transfers. What are these and how much will they be?	Because water transfers are new to the SFPUC there is uncertainty of potential impacts. This statement provides a means for recouping costs that were not anticipated at this time. Extraordinary costs will be calculated in accordance with procedures set forth in the Master Contract.
32	Transfers	How will transferred water be accounted for and monitored?	Each agency is responsible for notifying the SFPUC and BAWUA of intended transfers. The SFPUC will keep track of all transferred water.
33	Transfers	What is BAWUA's role in the IWSAP transfer market?	During a drought, BAWUA will disseminate information to its Members on individual agency allocations, usage, unused allocations, and transfers. It is hoped that the dissemination of this information will facilitate the development of a healthy transfer market between the BAWUA agencies.
34	Voluntary/Mandatory Reductions	What is the meant by voluntary and mandatory reductions?	SFPUC has the ability to declare either a voluntary or mandatory rationing program. In a voluntary rationing program, excess use charges will not be applied. Excess use charges are included in a mandatory rationing program. Banking is allowed under both voluntary and mandatory rationing programs.
35	Voluntary/Mandatory Reductions	Is there a specific level of rationing that has been defined for whether voluntary or mandatory reductions will be implemented?	There is no predetermined identification of when mandatory rationing will be necessary. This decision will be made based upon the information available at that particular time.

Overview

- IWSAP development
- Purpose and objectives of IWSAP
- Key provisions of IWSAP
- Recommended allocation methods
- Frequently Asked Questions (FAQ)
- Roll Out: Timeline & next steps

What Is An "Interim Water Shortage Allocation Plan"?

It is a plan that describes how water will be allocated during droughts:

- ***between the San Francisco Public Utilities Commission (SFPUC) and the BAWUA Member Agencies collectively, and***
- ***among the individual BAWUA Members.***

This plan shall expire on June 30, 2009 coincident with the expiration date of the existing Master Contract

Attachment 6

Why Is A Shortage Allocation Plan Needed Now?

- Satisfy legal and regulatory requirements:
  - Section 7.03 Master Contract
  - BMP #10 ("Wholesale Agency Assistance Programs")
  - CALFED and BARWRP objectives of removing conservation deterrents
- Plan and manage limited supplies better
- Encourage development of conservation and reclamation projects and alternative supplies

What Are the Contract Provisions?

Section 7.03 Shortages

- **Section 7.03(a):** SFPUC and Suburbs shall negotiate a "water conservation plan" which allocates water between the City and Suburban Purchasers and their retail customers in times of shortage. Such a plan will supersede Section 7.03(b)
- **Section 7.03(b):** Each Suburban Purchaser's share during a shortage is equal to its share of the deliveries immediately prior to the shortage
- No provisions stipulating SFPUC's share of available water

What happened during the last drought?

- SFPUC imposed a water conservation plan based on "Inside/Outside" method
- banking of unused allocations allowed with unlimited carryover
- no transfers allowed
- excess use charges levied monthly

It is unclear what allocation method SFPUC will implement during the next drought

What are the disadvantages of the Master Contract & Inside/Outside methods?

- penalize ongoing conservation and development of alternative supplies
- banking method resulted in excessive balances
- reconciliation of excess use charges made monthly collection an unnecessary administrative effort
- opportunities to share local supplies not facilitated (intra-BAWUA transfers not allowed)

History of Development

- IWSAP Workshop (November 1999)
- Initial outreach and assistance effort (Spring 2000)
- Membership support expressed for Intra-BAWUA Allocation method (March 17, 2000)
- Presentation of Draft Plan to Membership requesting comments (June 16, 2000)
- Second outreach effort (July 2000)
- Membership comments solicited (July 2000)
- SFPUC/BAWUA split negotiations completed (September 2000)
- BAUWA Board adoption of recommended SFPUC/BAWUA splits (September 21, 2000)

What are the Objectives of the Plan?

- **Providing**
  - predictable allocations for planning purposes
  - water for basic needs of customers
  - consistent, predetermined rules
- **Offering incentives to:**
  - stay within allocations during shortages
  - conserve at all times
  - develop & manage alternative supplies
- **Avoiding :**
  - preventable adverse economic impacts
  - reallocation of investments among agencies
- **Not penalizing appropriate planning**
- **Recognizing inherent differences in land use & climate**
- **Being easily understood and administered**

What Is Being Proposed?

A Plan that:

- Provides more certainty to BAWUA Members during a shortage,
- Defines how water shortages will be shared between SFPUC and the BAWUA Members collectively,
- Defines how water will be allocated among BAWUA Members during shortages, and
- Enables banking and transfers during a shortage.

IWSAP Provisions

- Cutback Levels
  - Plan applies to system-wide cutbacks of 20%
- Shortage Conditions
  - Voluntary: no excess use charges; banking & transfers allowed
  - Mandatory: excess use charges apply; banking & transfers allowed
- Allocations
  - SFPUC/BAWUA split
  - Intra-BAWUA Annual Allocation Method

IWSAP Provisions (cont.)

- Banking & Transfers
  - Transfer of shortage allocations allowed
  - Usage below allocations can be banked
  - Transfer of bank balances allowed
  - Bank balances carry over to next hydrological year
  - SFPUC may suspend future bank accrual or set bank ceilings
- Excess Use Charges
  - Same charges as last drought
  - Excess use and associated charges identified on monthly SFPUC invoices
  - Excess use charges applied annually against annual allocation

For the BAWUA Members, the IWSAP is comprised of two Plans:

- Tier 1 Plan: This Plan allocates water between SFPUC and the collective BAWUA agencies
- Tier 2 Plan: This Plan allocates water among the Suburban Purchasers

Tier 1 Plan
SFPUC/BAWUA Split

- **Reached a final set of numbers (Sept. 2000)**
- **Significant movement by SFPUC from original proposal**
- **BAWUA "Conditions of Satisfaction" met**
  - BAWUA IWSAP objectives satisfied
  - Consistent with Intra-BAWUA IWSAP concepts
  - Average BAWUA cutback no greater than 27%
  - Split Comparable to Actual Drought Experiences
  - GPCPD Between "Like" Agencies Comparable
- **Satisfactory results for BAWUA Membership**

Recommended SFPUC/BAWUA Split

System-Wide Shortage	SFPUC Share (%)	BAWUA Share (%)
5%	35.5	64.5
10%	36	64
15%	37	63
20%	37.5	62.5

Tier 2 Plan
Intra-BAWUA Allocation

- **Comprised of 3 equal components**
  - 2/3 of the allocation fixed
  - 1/3 of the allocation variable
- **Component #1(fixed)**
  - for majority of BAWUA agencies: Supply Assurance or 3 year average usage FY 96-97 through FY 98-99
  - San Jose & Santa Clara: contract "caps"
  - Hayward & Estero: 2010 demand projections
- **Component #2 (fixed)**
  - fixed 3 year average usage (FY 96-97 through FY 98-99)
- **Component #3 (variable)**
  - variable 3 year rolling average usage just prior to the drought

Intra-BAWUA Allocation (cont.)

- The method is simple, easy to explain and easy to calculate
- Agency percentage and mgd cutbacks (both high and low) are pulled towards the middle (towards the average cutback)
- Special cases have been accommodated in a straightforward manner without additional complexity
- A majority of the allocation is fixed

Results of Applying IWSAP (Residential Use - 1998/99 Data) 20% System-Wide Shortage

BAWUA Agencies Similar to SF	1998/99 Avg Res GPCPD	Results % Cutback	Results gpcpd
Brisbane	66.6	23.5%	51.0
CWS-SSF	66.5	25.5%	49.5
North Coast	65.7	23.9%	50.0
San Bruno	69.7	28.4%	49.9
BAWUA Avg.	92.9	23.6%	71.0
CCSF*	60.0	13.1%	52.1

Why aren't the "Percent Cutbacks" the same for everyone?

- **Differences in cutback percentages reflect differences in land use, climate, and other characteristics of area served**
  - Differences among all BAWUA agencies
  - Difference between SFPUC and BAWUA
- **Similar differences seen during last drought**
- **IWSAP reduces the range of cutback differences among the BAWUA agencies**
- **IWSAP allows for some reflection of changes in land use and growth (1/3 variable)**

-- "The Bottom Line" --
Conditions of Satisfaction

- BAWUA IWSAP objectives satisfied
- Consistent with key concepts of Intra-BAWUA IWSAP
- Average BAWUA cutback no greater than 27%
  greatest avg. BAWUA cutback recommended = 23.6%
- Split Comparable to Actual Drought Experiences
  62.5% BAWUA share comparable to allocations during last drought
- GPCPD Between "Like" Agencies Comparable *at 20% system wide shortage, differences from CCSF GPCPD results: Cal Water/SSF v. CCSF = -5%*

Frequently Asked Questions "FAQ"

- F.A.Q. – Draft distributed at June Quarterly meeting to assist Membership review
- Answers many of the questions raised by different agencies

Example FAQ:

What Does "Interim" Mean?

The IWSAP would only apply until one of the following occurs:

- **The Master Contract ends (2009)**
- **BAWUA and SFPUC mutually agree to change the plan prior to 2009**

What Is Being Requested Today?

It is requested that the resolution adopting the Interim Water Shortage Allocation Plan (both Tier One and Tier Two) be passed.

Once similar resolutions have been passed by all BAWUA agencies, the IWSAP will become effective.

ATTACHMENT H

Water Conservation Program Resolutions

RESOLUTION NO. 88-20

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE DECLARING A WATER SHORTAGE EMERGENCY, ADOPTING A WATER CONSERVATION PROGRAM INCLUDING EXCESS USE CHARGES, AND REPEALING RESOLUTION NO. 88-17

WHEREAS, the City of Brisbane purchases water from the San Francisco Water Department for resale to customers in the City of Brisbane water service area; and

WHEREAS, because of drought conditions over the past two years and the resultant lack of adequate water supply in its system, the San Francisco Water Department has implemented a mandatory water rationing program for all its customers, including the City of Brisbane, effective May 1, 1988; and

WHEREAS, in order to reduce water usage in the City of Brisbane water service area in accordance with the San Francisco Water Department's water rationing program and in keeping with the need for water conservation throughout the San Francisco Bay Area, the City of Brisbane has developed a Water Conservation Program, attached hereto as Exhibit "A", setting forth certain water use rules, regulations and restrictions and establishing water allotments and excess use charges for water users in the City of Brisbane water service area; and

WHEREAS, said Water Conservation Program is intended to conserve the water supply of the City of Brisbane for the greatest public benefit with particular regard to domestic use, sanitation and fire protection; and

WHEREAS, the City Council of the City of Brisbane noticed a public hearing on June 2, 1988, to be held on June 13, 1988, and the public hearing was held on that date.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brisbane as follows:

Section 1. The Council hereby finds and declares a water shortage emergency to exist.

Section 2. Pursuant to the authority set forth in Sections 375 et seq. of the Water Code, the Water Conservation Program attached hereto as Exhibit "A" and incorporated herein by reference for all purposes is hereby adopted.

Section 3. Pursuant to the provisions of Section 377 of the Water Code, any person violating, or causing the violation of the provisions of this resolution or the provisions of any adjustment or exception granted pursuant hereto, shall be guilty of a misdemeanor and, upon conviction thereof, shall be punishable by a fine of not more than One Thousand Dollars ($1,000.00) or imprisonment for a term not exceeding thirty (30) days, or by both such fine and imprisonment. Every day, or any portion thereof, any violation of any provision of this resolution, or any provision of any adjustment or exception granted pursuant hereto, shall continue, shall constitute a separate offense and shall be punishable

as hereinabove provided. The remedies and penalties provided for in this resolution shall be cumulative and not exclusive, and shall be in addition to any or all other remedies available to the City.

Section 4. Resolution No. 88-17 is hereby repealed in its entirety.

Section 5. The City Clerk is hereby directed to post, in accordance with law, copies of this resolution.

LEWIS E. GRAHAM II
Mayor

I hereby certify that the foregoing Resolution No. 88-20 was duly and regularly adopted at a regular meeting of the Brisbane City Council on June 13, 1988 by the following vote:

AYES:	Nielsen, Miller, Smith, Attard, Graham
NOES:	None
ABSENT:	None

LYNNE BOWMAN-JONES
City Clerk

Exhibit "A"
Resolution No. 88-20

CITY OF BRISBANE
WATER CONSERVATION PROGRAM
June 13, 1988

This Water Conservation Program applies to all users of water supplied by the City of Brisbane. Except as otherwise stated below, the program becomes effective immediately.

A. Water Use Rules, Regulations and Restrictions

The following uses of water are prohibited:

1. Use of water through any meter when the customer has been given ten (10) days notice to repair broken or defective plumbing, sprinkler, watering or irrigation systems and has failed to effect such repairs;

2. Use of water which results in flooding or runoff in gutters or streets;

3. Use of water, through a hand-held hose without a positive shut-off valve, for washing cars, buses, boats, trailers or other vehicles;

4. Use of potable water for washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas;

5. Use of water for filling any existing or new swimming pool;

6. Use of water to clean, fill or maintain levels in decorative fountains;

7. Use of water for new landscaping or expansion of existing landscaping unless low water use plants and irrigation systems are employed;

8. Service of water by restaurants except upon the request of a customer.

B. Water Allotments

1. Water use shall be reduced to the following allotments:

a. Forty percent (40%) of the water used during the corresponding billing period during calendar year 1987, which water is used solely for landscaping or other "outdoor" uses and is separately metered for those purposes.

b. Seventy-five percent (75%) of all water, other than that set forth in Section B.1.a. above, used during the corresponding billing period during the calendar year 1987, provided however that, notwithstanding the seventy-five percent (75%) limitation, a minimum allotment of eight (8) units per billing period shall be allowed for all users and no allotment for a single-family residence shall exceed thirty (30) units per billing period.

2. For new residences that had no water usage during calendar year 1987, the allotment shall be twelve (12) units of water per billing period per single-family dwelling unit and eight (8) units of water per billing period per multiple-family dwelling unit or secondary dwelling unit.

3. For new non-residential customers who had no water usage during calendar year 1987, the allotment for each billing period shall be equal to the allotment for users of comparable size and character, as determined by the City Manager.

C. Exceptions

Upon written application for an exception or adjustment made to the City Manager, the City Manager or his/her designee may grant permits for the uses of water otherwise prohibited or adjust allotments, if he/she finds that to fail to do so would cause an emergency condition adversely affecting the health, sanitation, fire protection, or safety of the public and the customer has adopted all practicable water conservation measures.

D. Excess Water Use Charges

Excess use charges of the following amounts shall be levied for water used in excess of the applicable allotment. These charges are in addition to the regular rates charged for water.

Use in Excess of Allotment	Excess Use Charge Per unit (100 cu.ft.) of Water for All Water Used in Excess of Allotment
Up to 10%	$1.00
10.1% to 20%	$2.00
20.1% to 30%	$4.00
30.1% to 40%	$6.00
40.1% to 50%	$8.00
50.01% or over	$10.00

RESOLUTION NO. 88-35

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE AMENDING EXHIBIT "A" OF RESOLUTION NO. 88-20 RELATING TO WATER CONSERVATION

WHEREAS, on June 13, 1988, by Resolution No. 88-20, the City Council of the City of Brisbane declared a water shortage emergency to exist and adopted a water conservation program; and

WHEREAS, said program is set forth in Exhibit "A" attached to Resolution No. 88-20 and includes water allotments and excess use charges; and

WHEREAS, the objective of said program is to reduce water usage in the City of Brisbane water service area in accordance with the San Francisco Water Department's water rationing program and in keeping with the need for water conservation throughout the San Francisco Bay Area; and

WHEREAS, said water allotments and excess use charges, as presently constituted, do not fairly and reasonably meet the City Council's intent in that they result in water use charges higher than necessary to meet the City Council's objective; and

WHEREAS, the City Council of the City of Brisbane noticed a public hearing on September 2, 1988, to be held on September 12, 1988, as required by law.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brisbane that Exhibit "A" of Resolution No. 88-20 is hereby amended as shown on the Amended Exhibit "A" attached hereto.

LEWIS E. GRAHAM II
Mayor

I hereby certify that the foregoing Resolution No. 88-35 was duly and regularly adopted at a regular meeting of the Brisbane City Council on September 12, 1988 by the following vote:

AYES: NIELSEN, MILLER, SMITH, ATTARD, GRAHAM
NOES: NONE
ABSENT: NONE

LYNNE BOWMAN-JONES
City Clerk

Amended Exhibit "A"
Resolution No. 88-35

CITY OF BRISBANE
WATER CONSERVATION PROGRAM
June 13, 1988

This Water Conservation Program applies to all users of water supplied by the City of Brisbane. Except as otherwise stated below, the program becomes effective immediately.

A. Water Use Rules, Regulations and Restrictions

The following uses of water are prohibited:

1. Use of water through any meter when the customer has been given ten (10) days notice to repair broken or defective plumbing, sprinkler, watering or irrigation systems and has failed to effect such repairs;

2. Use of water which results in flooding or runoff in gutters or streets;

3. Use of water, through a hand-held hose without a positive shut-off valve, for washing cars, buses, boats, trailers or other vehicles;

4. Use of potable water for washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas;

5. Use of water for filling any existing or new swimming pool;

6. Use of water to clean, fill or maintain levels in decorative fountains;

7. Use of water for new landscaping or expansion of existing landscaping unless low water use plants and irrigation systems are employed;

8. Service of water by restaurants except upon the request of a customer.

B. Water Allotments

1. Water use shall be reduced to the following allotments:

a. Forty percent (40%) of the water used during the corresponding billing period during calendar year 1987, which water is used solely for landscaping or other "outdoor" uses and is separately metered for those purposes.

b. Seventy-five percent (75%) of all water, other than that set forth in Section B.1.a. above, used during the corresponding billing period during the calendar year 1987, provided however that, notwithstanding the seventy-five percent (75%) limitation, a minimum allotment of sixteen (16) units per billing period shall be allowed for all users and no allotment for a single-family residence shall exceed thirty (30) units per billing period.

2. For new residences that had no water usage during calendar year 1987, the allotment shall be sixteen (16) units of water per billing period per single-family dwelling unit and eight (8) units of water per billing period per multiple-family dwelling unit or secondary dwelling unit.

3. For new non-residential customers who had no water usage during calendar year 1987, the allotment for each billing period shall be equal to the allotment for users of comparable size and character, as determined by the City Manager.

C. Exceptions

Upon written application for an exception or adjustment made to the City Manager, the City Manager or his/her designee may grant permits for the uses of water otherwise prohibited or adjust allotments, if he/she finds that to fail to do so would cause an emergency condition adversely affecting the health, sanitation, fire protection, or safety of the public and the customer has adopted all practicable water conservation measures. The City Manager or his/her designee may make adjustments to the excess usage charges where failure to do so would impose an undue hardship.

D. Excess Water Use Charges

Excess use charges of the following amounts shall be levied for water used in excess of the applicable allotment. These charges are in addition to the regular rates charged for water.

Use in Excess of Allotment	Excess Use Charge Per unit (100 cu.ft.) of Water for All Water Used in Excess of Allotment
Up to 10%	$0.25
10.1% to 20%	$0.50
20.1% to 30%	$1.00
30.1% to 40%	$1.50
40.1% to 50%	$2.00
50.1% or over	$2.50

RESOLUTION NO. 89-27

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE
DECLARING AN END TO THE WATER SHORTAGE EMERGENCY
AND REPEALING RESOLUTION NO. 88-20 AND RESOLUTION NO. 88-35

WHEREAS, on June 13, 1988, by Resolution No. 88-20, the City Council of the City of Brisbane declared a water shortage emergency to exist and adopted a water conservation program which mandated restrictions on water use and established excess use charges; and

WHEREAS, on September 12, 1988, by Resolution No. 88-35, the City Council of the City of Brisbane amended certain provisions of the Water Conservation Program by amending Resolution No. 88-20, and

WHEREAS, there is now sufficient water storage in the system which serves the City of Brisbane and surrounding communities to eliminate the need for water use restrictions and excess use charges.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brisbane as follows:

Section 1. The City Council hereby finds and declares that a water shortage emergency no longer exists.

Section 2. Resolution No. 88-20 and Resolution No. 88-35 are hereby repealed in their entirety.

FRED SMITH
Mayor

I hereby certify that the foregoing Resolution No. 89-27 was duly and regularly adopted at a regular meeting of the Brisbane City Council on May 22, 1989, by the following vote:

AYES:	Attard, Miller, Graham, Nielsen, Smith
NOES:	None
ABSENT:	None

LYNNE BOWMAN-JONES
City Clerk

RESOLUTION NO. 90-34

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE DECLARING A WATER SHORTAGE EMERGENCY AND ADOPTING A WATER CONSERVATION PROGRAM

WHEREAS, the City of Brisbane purchases water from the San Francisco Water Department for resale to customers in the Brisbane Water Service Area; and

WHEREAS, because of drought conditions over the past four years and the resultant lack of adequate water supply in its system, the San Francisco Water Department has implemented a mandatory water rationing program for all its customers, including the City of Brisbane, effective immediately; and

WHEREAS, in order to reduce water usage in the Brisbane Water Service Area in accordance with the San Francisco Water Department's water rationing program and in keeping with the need for water conservation throughout the San Francisco Bay Area, the City of Brisbane has developed a Water Conservation Program, attached hereto as Exhibit A and incorporated herein by reference, calling for certain water use rules, regulations and restrictions to be implemented within the Brisbane Water Service Area; and

WHEREAS, said Water Conservation Program is intended to conserve the water supply of the City of Brisbane for the greatest public benefit with particular regard to domestic use, sanitation and fire protection.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Brisbane hereby declares a water shortage emergency.

BE IT FURTHER RESOLVED that the City Council of the City of Brisbane adopts the Water Conservation Program attached hereto as Exhibit A and that said Program shall become effective immediately upon adoption.

RAYMOND C. MILLER
Mayor

I hereby certify that the foregoing Resolution No. 90-34 was duly and regularly adopted at an adjourned regular meeting of the Brisbane City Council on May 29, 1990 by the following vote:

AYES:	Panza, Kerwin, Johnson, Waldo, Miller
NOES:	None
ABSENT:	None

LYNNE BOWMAN-JONES
City Clerk

Exhibit A
Resolution No. 90-34

CITY OF BRISBANE
WATER CONSERVATION PROGRAM
May 29, 1990

This Water Conservation Program applies to all users of water supplied by the City of Brisbane. Except as otherwise stated below, the program becomes effective immediately.

A. Water Use Rules, Regulations and Restrictions

The following restrictions shall apply to all water customers:

1. Water waste, including but not limited to, any flooding or runoff into the street or gutters is prohibited.

2. Hoses or potable water shall not be used for washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas.

3. Hoses used for any purpose must have positive shutoff valves.

4. Restaurants shall serve water to customers only upon request.

5. Water used for all cooling purposes must be recycled to the extent possible.

6. Water shall not be used to clean, fill or maintain levels in decorative fountains.

7. Additional water will not be allowed for new landscaping or expansion of existing facilities unless low water use landscaping designs and irrigation systems are employed.

8. Water service connections for new construction shall be granted only if water saving fixtures or devices are incorporated into the plumbing system.

9. Construction water for consolidation of backfill, dust control or other non-essential purposes shall be denied if other methods or sources of non-potable water can be utilized.

10. Irrigation of lawns, playfields, parks, median strips, golf courses, cemeteries and landscaping of any type with potable water shall be reduced by at least the amount specified for outside use in the adopted rationing plan.

11. Use of water through any meter is prohibited when the customer has been given ten (10) days notice to repair broken or defective plumbing, sprinkler, watering or irrigation systems and has failed to effect such repairs.

12. Use of water for filling any existing or new swimming pool is prohibited.

B. Water Allotments

1. Water use shall be reduced to the following allotments:

a. Forty percent (40%) of the water used during the corresponding billing period during calendar year 1987, which water is used solely for landscaping or other "outdoor" uses and is separately metered for those purposes.

b. Seventy-five percent (75%) of all water, other than that set forth in Section B.1.a. above, used during the corresponding billing period during the calendar year 1987, provided however that, notwithstanding the seventy-five percent (75%) limitation, a minimum allotment of sixteen (16) units per billing period shall be allowed for all users and no allotment for a single-family residence shall exceed thirty (30) units per billing period.

2. For new residences that had no water usage during calendar year 1987, the allotment shall be sixteen (16) units of water per billing period per single-family dwelling unit and eight (8) units of water per billing period per multiple-family dwelling unit or secondary dwelling unit.

3. For new non-residential customers who had no water usage during calendar year 1987, the allotment for each billing period shall be equal to the allotment for users of comparable size and character, as determined by the City Manager.

C. Exceptions

Upon written application for an exception or adjustment made to the City Manager, the City Manager or his/her designee may grant permits for the uses of water otherwise prohibited or adjust allotments, if he/she finds that to fail to do so would cause an emergency condition adversely affecting the health, sanitation, fire protection, or safety of the public and the customer has adopted all practicable water conservation measures. The City Manager or his/her designee may make adjustments to the excess usage charges where failure to do so would impose an undue hardship.

RESOLUTION NO. 90-41

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE INCORPORATING EXCESS USE CHARGES INTO THE 1990 WATER CONSERVATION PROGRAM

WHEREAS, in order to reduce water usage in the Brisbane Water Service Area in accordance with the San Francisco Water Department's rationing program, on May 29, 1990, the City Council of the City of Brisbane adopted Resolution No. 90-34, declaring a water shortage emergency and adopting a Water Conservation Program; and

WHEREAS, on June 11, 1990, a public hearing was held to consider the matter of water rates; and

WHEREAS, it was determined that Excess Water Use Charges must be established in order to effectively promote water conservation so that the overall reduction goal of 25% can be met as required by the San Francisco Water Department.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brisbane, pursuant to Ordinance No. 91, Section 2, and Resolution No. 73-26, that the rates for Excess Use Charges are established as follows, **and shall become effective July 1, 1990:**

Use in Excess of Allotment		The Excess Use Charge per Unit (100 cubic feet) of Water for All Water used in excess of Allotment shall be
up to	10.00%	$1.00
10.01%	20.00%	4.00
20.0%	40.00%	5.00
40.01	and over	10.00

RAYMOND C. MILLER
Mayor

I hereby certify that the foregoing Resolution No. 90-41 was duly and regularly adopted at a regular meeting of the Brisbane City Council on June 25, 1990 by the following vote:

AYES: Panza, Kerwin, Johnson, Waldo, Miller
NOES: None
ABSENT: None

ROBIN LEITER
Acting City Clerk

RESOLUTION NO. 91-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE DECLARING A WATER SHORTAGE EMERGENCY AND ADOPTING A WATER CONSERVATION PROGRAM

WHEREAS, the City of Brisbane purchases water from the San Francisco Water Department for resale to customers in the Brisbane Water Service Area; and

WHEREAS, because of drought conditions over the past four years and the resultant lack of adequate water supply in its system, the San Francisco Water Department has implemented a mandatory water rationing program for all its customers, including the City of Brisbane, effective immediately; and

WHEREAS, in order to reduce water usage in the Brisbane Water Service Area in accordance with the San Francisco Water Department's water rationing program and in keeping with the need for water conservation throughout the San Francisco Bay Area, the City of Brisbane has developed a Water Conservation Program, attached hereto as Exhibit A and incorporated herein by reference, calling for certain water use rules, regulations and restrictions to be implemented within the Brisbane Water Service Area; and

WHEREAS, said Water Conservation Program is intended to conserve the water supply of the City of Brisbane for the greatest public benefit with particular regard to domestic use, sanitation and fire protection.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Brisbane hereby declares a water shortage emergency.

BE IT FURTHER RESOLVED that the City Council of the City of Brisbane adopts the Water Conservation Program attached hereto as Exhibit A and that said Program shall become effective immediately upon adoption.

Steven W. Waldo

STEVEN W. WALDO
Mayor

I hereby certify that the foregoing Resolution No.91-13 was duly and regularly adopted at a regular meeting of the Brisbane City Council on March 11, 1991 by the following vote:

AYES: COUNCILMEMBERS JOHNSON, KERWIN, MILLER, PANZA, MAYOR WALDO
NOES: COUNCILMEMBERS NONE
ABSENT: COUNCILMEMBERS NONE

Angelina Reyes

ANGELINA REYES
City Clerk

CITY OF BRISBANE

GUADALUPE VALLEY MUNICIPAL IMPROVEMENT DISTRICT (GVMID)

1991 PROPOSED MANDATORY WATER CONSERVATION PROGRAM

MARCH 11, 1991

CITY OF BRISBANE
GUADALUPE VALLEY MUNICIPAL IMPROVEMENT DISTRICT (GVMID)
1991 WATER RATIONING PROGRAM

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RESOLUTION NO. 91-13

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE DECLARING A WATER SHORTAGE EMERGENCY AND ADOPTING A WATER CONSERVATION PROGRAM

WHEREAS, the City of Brisbane purchases water from the San Francisco Water Department for resale to customers in the Brisbane Water Service Area; and

WHEREAS, because of drought conditions over the past four years and the resultant lack of adequate water supply in its system, the San Francisco Water Department has implemented a mandatory water rationing program for all its customers, including the City of Brisbane, effective immediately; and

WHEREAS, in order to reduce water usage in the Brisbane Water Service Area in accordance with the San francisco Water Department's water rationing program and in keeping with the need for water conservation throughout the San Francisco Bay Area, the City of Brisbane has developed a Water Conservation Program, attached hereto as Exhibit A and incorporated herein by reference, calling for certain water use rules, regulations and restrictions to be implemented within the Brisbane Water Service Area; and

WHEREAS, said Water Conservation Program is intended to conserve the water supply of the City of Brisbane for the greatest public benefit with particular regard to domestic use, sanitation and fire protection.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Brisbane hereby declares a water shortage emergency.

BE IT FURTHER RESOLVED that the City Council of the City of Brisbane adopts the Water Conservation Program attached hereto as Exhibit A and that said Program shall become effective immediately upon adoption.

STEVEN W. WALDO
Mayor

I hereby certify that the foregoing Resolution No.**91-13** was duly and regularly adopted at a regular meeting of the Brisbane City Council on **March 11, 1991** by the following vote:

AYES:
NOES:
ABSENT:

ANGELINA REYES
City Clerk

RESOLUTION NO. GVMID 91 -01

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE GUADALUPE VALLEY MUNICIPAL IMPROVEMENT DISTRICT DECLARING A WATER SHORTAGE EMERGENCY AND ADOPTING A WATER CONSERVATION PROGRAM

WHEREAS, the Guadalupe Valley Municipal Improvement District (GVMID) purchases water from the San Francisco Water Department for resale to customers in the Brisbane Water Service Area; and

WHEREAS, because of drought conditions over the past four years and the resultant lack of adequate water supply in its system, the San Francisco Water Department has implemented a mandatory water rationing program for all its customers, including the GVMID, effective immediately; and

WHEREAS, in order to reduce water usage in the GVMID Water Service Area in accordance with the San francisco Water Department's water rationing program and in keeping with the need for water conservation throughout the San Francisco Bay Area, the GVMID has developed a Water Conservation Program, attached hereto as Exhibit A and incorporated herein by reference, calling for certain water use rules, regulations and restrictions to be implemented within the GVMID Water Service Area; and

WHEREAS, said Water Conservation Program is intended to conserve the water supply of the GVMID for the greatest public benefit with particular regard to domestic use, sanitation and fire protection.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the GVMID hereby declares a water shortage emergency.

BE IT FURTHER RESOLVED that the Board of Directors of the GVMID adopts the Water Conservation Program attached hereto as Exhibit A and that said Program shall become effective immediately upon adoption.

STEVEN W. WALDO
President

I hereby certify that the foregoing Resolution No. **GVMID 91-01** was duly and regularly adopted at a regular meeting of the GVMID Board of Directors on March 11, 1991 by the following vote:

AYES:
NOES:
ABSENT:

ANGELINA REYES
Secretary

wp50\data\wtrratio.prg

CITY OF BRISBANE
REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE
GUADALUPE VALLEY MUNICIPAL IMPROVEMENT DISTRICT (GVMID)

150 NORTH HILL DRIVE, SUITE # 40
BRISBANE, CA 94005
(415) 467 1515

****

INTERNAL OFFICE MEMORANDUM

TO: City Council / GVMID Board of Directors via City/District Manager

FROM: City/District Finance Director

SUBJECT: 1991 Water Rationing Program

DATE: February 29, 1991

For consideration at the C.C./District meeting of: March 11, 1991

RECOMMENDATION
Adopt the 1991 Water Rationing Program as recommended for the City of Brisbane and for the Guadalupe Valley Municipal Improvement District.

I. PROGRAM DESCRIPTION

A. BACKGROUND & DISCUSSION

The current 1990 comprehensive water rationing program was authorized by the Brisbane City Council on May 29, 1990 and requires 25% mandatory reduction in consumption on a system-wide basis, restrictions on various types of water use, an excess use charge structured to a maximum of 10 times the basic consumption charge for exceeding the allotment, and flow restrictions and termination of water service for non-compliance with the program elements.

While the program was reasonably successful in terms of overall compliance and the meeting of reduction goals (18% system-wide versus the stated goal of 25%), the current disastrous supply situation resulting from the continued fifth year of drought conditions has resulted in the necessity for revising the current rationing program to make it even more restrictive.

Such a revised program will require further changes in lifestyle patterns and will have economic impacts of varying degrees on the commercial and industrial activities in the service area.

B. RATIONING PLAN OBJECTIVES

The objective of any rationing plan is to meet essential water supply needs to minimize hardship on residential customers and businesses, and to provide an equitable distribution of available water supplies throughout the service area. The suggested rationing plan presented to the City Council/GVMID Board applies to all customers served by the City/GVMID.

II. WATER USE RESTRICTIONS

In a mandatory rationing program, water use restrictions serve as a significant means of generating water savings. The following use restrictions were applied in both the 1988 and 1990 rationing programs to all customers served within the City of Brisbane and GVMID.

A. Water waste, including but not limited to, any flooding or runoff into the street or gutters, is prohibited.

B. Hoses shall not be used to clean outside areas such as sidewalks, driveways, patios, plazas, homes, businesses, parking lots, roofs, awnings or other hard surface areas.

C. Hoses used for any purpose must have positive shutoff valves.

D. Restaurants shall serve water to customers only upon request.

E. Potable water shall not be used to clean, fill or maintain levels in decorative fountains. The use of groundwater is permitted.

F. Additional water will not be allowed for new landscaping or expansion of existing facilities unless low water use landscaping designs and irrigation systems are employed.

G. Water service connections for new construction shall be granted only if water saving fixtures or devices are incorporated into the plumbing system.

H. Use of potable water for consolidation of backfill, dust control or other non-essential construction purposes is prohibited. The use of groundwater and/or reclaimed water is permitted when approved by the Department of Health.

I. Irrigation of lawns, playfields, parks, golf courses, cemeteries, and landscaping of any type with potable water shall be reduced by at least the amount specified for outside use in the adopted rationing plan.

Because of the severity of the situation, the following additional water use restrictions are now proposed for all customers served by the City of Brisbane and GVMID.

J. Verified water waste as determined by the Department will serve as prima facie evidence that the allocation assigned to the water account is excessive; therefore the allocation will be subject to review and possible reduction, including termination of service. ??

Potable water ?

K. The washing of all automobiles, motorcycles, RV's, trucks, transit vehicles, trailers, boats, trains and airplanes is prohibited outside of a commercial washing facility.

licenses

L. Exceptions to use restriction (K) are windows on all vehicles and such commercial or safety vehicles requiring cleaning for health or safety reasons (i.e. garbage trucks, food delivery vehicles, ambulances, etc.).

M. Water used for all cooling purposes and for commercial car washes must be recycled.

N. The use of potable water on golf courses is limited to the irrigation of putting greens. The use of groundwater and/or reclaimed water is permitted when approved by the Department of Public Health. County - ?

O. The filling of new swimming pools, spas, hot tubs or the draining and refilling of existing pools, etc., is prohibited; topping off will be allowed to the extent that the designated allocation is not exceeded.

P. The irrigation of median strips with potable water is prohibited. The use of groundwater and/or reclaimed water is permitted when approved by the Department of Public Health.

Q. The use of potable water for street sweepers/washers is prohibited. The use of groundwater and/or reclaimed water is permitted when approved by the Department of Public Health.

III. DECISION MAKING MODEL

Figure (1) illustrates in graphic form the required storage increased by various levels of runoff and/or water transfers that dictate the level of mandatory rationing plan necessary to guarantee an adequate supply of water for the next two years.

Figure (2) illustrates the same information in numerical form, including the various probabilities of achieving the necessary levels of runoff.

IV. RECOMMENDED PLAN FOR ADOPTION

Based on available water in storage in the Hetch Hetchy Water and Power System, the following mandatory rationing program is recommended to the City Council/GVMID Board for adoption:

The intent of this rationing program is to reduce system-wide water demand by 45 percent compared to 1987 water use. The system-wide 45% reduction will be achieved through a 33% reduction in inside use and a 90% reduction in outside use. This will be achieved by making additional reductions in the amount of water used for irrigation and imposing major reductions on water used for business and domestic purposes.

The allocation plan governs customers within the City of Brisbane and GVMID service areas.

To meet this consumption goal, 1987 consumption levels will be reduced by 45% subject to the following minimum and maximum criteria:

Maximum Allocation for Single and Multi-Family Residences. No single family residence shall receive an allocation of more than 300 gallons per day or 24 CCF every two months; no multi-family residence (flats, tri-plexes, or apartments) shall receive an allocation of more than 150 gallons or .20 CCF per day times the number of living units in the building.

Minimum Allocation for All Residential Accounts. A minimum of 50 gallons or .0668 CCF per day per documented resident will be allowed. In the absence of just documentation with respect to the number of residents, the minimum allocation shall be 12 CCF every two months.

Irrigation Services. Accounts classified for irrigation only will be reduced by 90%.

Commercial/Industrial Allocations. Commercial and industrial

bonuses for reuse — pay to conserve

1987 consumption will be reduced by 45%. Hospitals and other health care facilities may be subject to lesser restrictions subject to verification that all conservation measures are in place; such approval shall require an on-site conservation inspection.

Allocation of New Accounts

Initial allocations will be established at 50 gallons per day. These allocations will be re-evaluated after customers have installed retrofit kits provided by Brisbane and GVMID Water Departments. After verification of installation, allocations will be calculated on the basis of the number of documented residents within a household, or, in the case of commercial or industrial customers, on the basis of business data supplied to the Department.

??

comparable businesses

Water Use Restrictions

Water use restrictions, both previously in place and newly recommended, shall be effective with the implementation of this plan. Violation of any water use restriction by any customer shall, after one written warning and in accordance with all applicable laws and legal restrictions, result in the installation of a flow restricting device in the service line of the customer; continued violation shall result in the termination of water service. The customer shall bear the cost of the enforcement action.

fines ??

how complicated to install ?

Excess Use Charges

The excess use charge structure currently in effect (since July 1, 1990) shall remain in effect. In addition, two consecutive excess use charges shall result in the installation of a flow restricting device in the service line of the customer. A third consecutive excess use charge shall result in the termination of water service.

hearing — due process

Mandatory conservation Inspections

Mandatory on-site inspections shall be required of large water consumers, installations not internally metered (i.e. master-metered facilities) and facilities where there is a reasonable indication of water waste. Failure to permit such an inspection shall result in service restriction or termination of service. Leaks identified pursuant to such inspection not repaired within 30 days shall result in a 10% allocation reduction and/or termination of water service.

progressive

Exceptions to Rationing Allocations or Water Use Restrictions

Exceptions to rationing allocations or water use restrictions may be made for the protection of public health or safety. Any exceptions are subject to the following requirements and procedures:

1. In the case of a rationing allocation, it must be shown

that the allocation is not sufficient to meet public health or safety needs. In the case of water use restrictions, it must be shown that there are no alternatives to the use of water.

2. Water used under this exception procedure must be efficiently used without waste.

3. Applications must be in writing to the Brisbane/GVMID Water Departments, 150 North Hill Dr., Suite 40, Brisbane, CA 94005.

4. Appeals of rationing allocations determined to contain false information shall result in a reduction in the allocation and the installation of a flow restricting device in the service line of the customer.

5. Approval of exceptions may require verification that all appropriate conservation measures are in place and may require an on-site conservation inspection prior to approval.

6. Denials of application may be appealed to the City/District Manager of the Brisbane/GVMID Water Departments.

V. BUDGET REQUIREMENTS

Funding for the balance of the 1991 fiscal year may be accommodated in the 1990/91 Budget. Funding for the 1991/92 budget will be included in the 1991/92 budget when presented to the Council/Board.

A Higher level of rationing (i.e. 45%) may require additional effort and possibly additional clerical staff to respond to customer inquiries, provide conservation information, administer retrofit and rebate programs and process requests for water allotment adjustments and exceptions to the regulations; and field staff to inspect residential, commercial, industrial and other large water users based on both allocation appeals and high water use situations. If and when a higher level of staffing becomes necessary, staff will notify the Council/Board and make recommendations accordingly.

VI. IMPLEMENTATION SCHEDULE

Should the City Council/Board of Directors adopt the recommended mandatory rationing program at the public hearing on March 11, 1991, the following timetable will apply:

3/11/91	Adoption of mandatory rationing plan
4/1/91	Water use restrictions become effective (prior notification to customers through newspaper advertisements) special letter to all customers
5/1/91	Written notification of new allocations to all customers
6/1/91	Allocations become effective — late
7/1/91	New conservation related rates and excess use charges based on new allocations become effective for meter readings on and after 7/1/91 (water used in May & June).

Thus 5/1/91

CITY OF BRISBANE
GUADALUPE VALLEY MUNICIPAL IMPROVEMENT DISTRICT (GVMID)
1991 PROPOSED MANDATORY WATER CONSERVATION PROGRAM
MARCH 11, 1991

COMPARATIVE TABLE

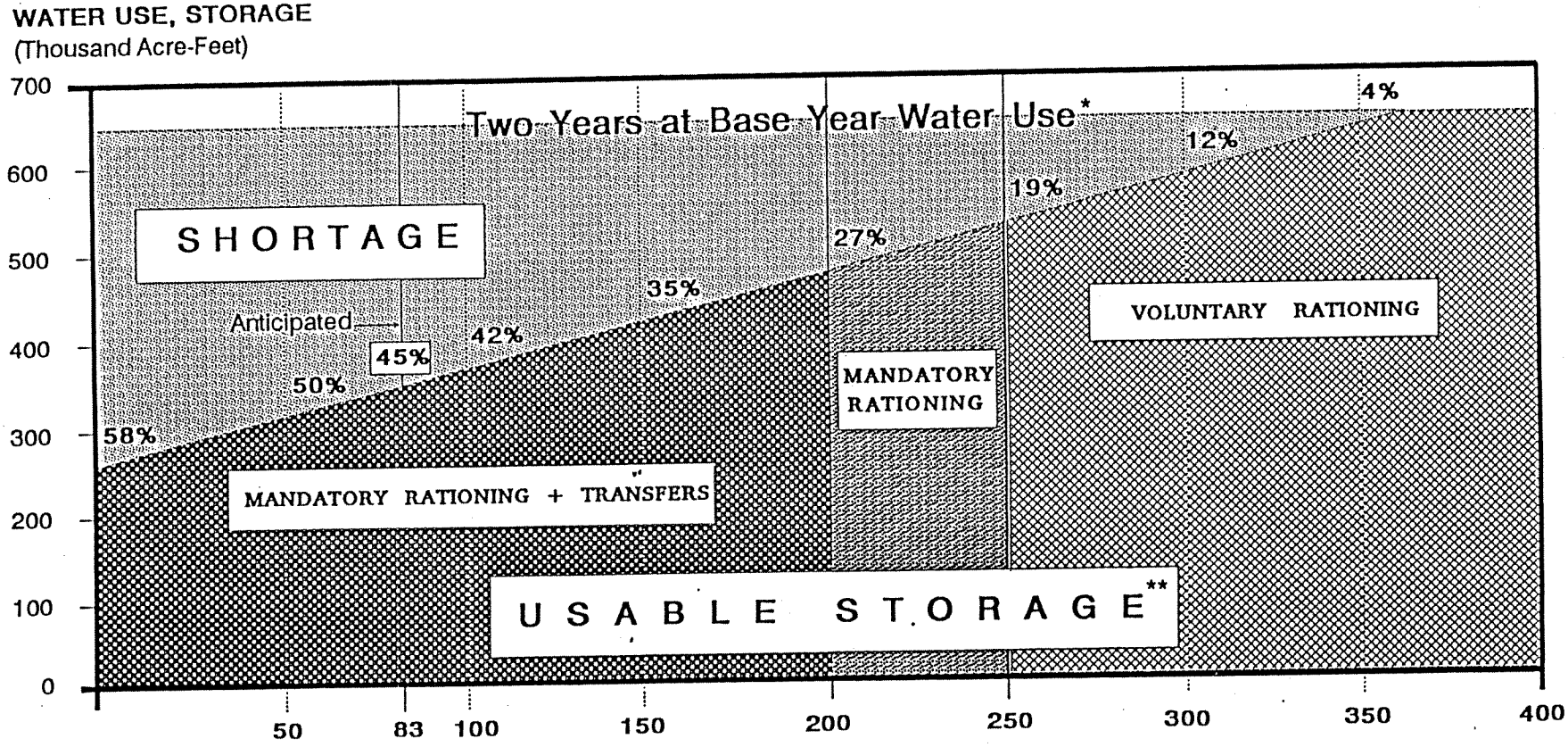
	Current 1990 Plan	Proposed 1991 Plan
ALLOCATIONS: (1)		
Single Family Residence:		
Basic Allocation	75% of 1987 Consumption	55% of 1987 Consumption
Minimum	16 CCF every 2 months	12 CCF every 2 months
Maximum	30 CCF every 2 months	24 CCF every two months
Duplexes:		
Basic Allocation	75% of 1987 Consumption	55% of 1987 consumption
Minimum	16 CCF every 2 months	50 GPD/Resident or 12 CCF/2 months
Maximum	30 CCF every 2 months	150 GPD/Unit or 12 CCF/2 months/Unit
Multiple Family Residences:		
Basic Allocation	75% of 1987 Consumption	55% of 1987 consumption
Minimum	8 CCF / Unit every 2 months	50 GPD/Resident or 12 CCF/2 months
Maximum	30 CCF every 2 months	150 GPD or 12 CCF/2 months/Unit
New Services	16 CCF every two months	50 GPD until water flow restrictions are installed; Same as Residential thereafter. New Commercial to be based on data and circumstances supplied to the Water Department.
Irrigation Services:		
Basic Allocation	40% of 1987 Consumption	10% of 1987 Consumption
Commercial/Industrial:		
Basic Allocation	75% of 1987 Consumption	55% of 1987 Consumption
EXCESS USE CHARGES		
Excess Use up to 10%	$1.00/CCF for Excess Use	No Change
Excess Use 10.01-20.00%	4.00/CCF for Excess Use	No Change
Excess Use 20.01-40.00%	5.00/CCF for Excess Use	No Change
Excess Use over 40.00%	10.00/CCF for Excess Use	No Change

anybody here?

(1) Allocations and consumptions are expressed in units of 100 cubic feet (CCF) which equals 748.1 Gallons.

GPD = Gallons Per Day

1 9 9 1
WATER SUPPLY AND RATIONING OPTIONS



* Based on 1987 water use (325,000 acre-feet per year)

** Assumes minimum reservoir pool of 85,000 acre-feet.

(Figure 1)

1 9 9 1

WATER SUPPLY AND RATIONING OPTIONS

(In Thousand Acre-Feet)

	POSSIBLE RUNOFF AND TRANSFERS	2-YRS NORMAL USAGE*	USABLE RESERVOIR STORAGE**	SHORTAGE	PERCENT	RATIONING PLAN NEEDED
	0	650	275	375	58%	Mandatory + Transfers
	50	650	325	325	50%	Mandatory + Transfers
Anticipated →	83	650	358	292	45%	Mandatory + Transfers
	150	650	425	225	35%	Mandatory + Transfers
	200	650	475	175	27%	Mandatory
	250	650	525	125	19%	Voluntary
	300	650	575	75	12%	Voluntary
	350	650	625	25	4%	Voluntary

*Based on 1987 water use (325,000 acre-feet per year).

**Assumes minimum reservoir pool of 85,000 acre-feet.

(Figure 2)

wp50\data\aaaamemo.frm

CITY OF BRISBANE
REDEVELOPMENT AGENCY OF THE CITY OF BRISBANE
GUADALUPE VALLEY MUNICIPAL IMPROVEMENT DISTRICT

150 NORTH HILL DRIVE, SUITE # 40
BRISBANE, CA 94005
(415) 467 1515

****

INTERNAL OFFICE MEMORANDUM

TO: City Council via City Manager

FROM: Finance Director

SUBJECT: Final review of Water Conservation Program

DATE: March 22, 1991

For Consideration at the C.C./District meeting of: March 25, 1991

On March 11, 1991, the City Council adopted the 1991 Water Conservation Program. At the time of adoption, the Council directed Staff to make certain changes in the program. The changes, particularly in connection with enforcement of the Excess Use Charges, were all made and are now incorporated into the final program before you.

The Changes which were made are as follows:

1. Paragraph B of Section II of the program: Change the word "Hoses" to "water". — see my language

potable

2. Paragraph F of Section II of the program: Terminate the paragraph after the first word "landscaping". — (Refer to planning commission policy

3. Paragraph L of Section II of the program: add "car licenses" to the exception.

4. The word "County's" should precede the Department of Public Health wherever it is indicated in the program that the Department's approval is needed. In addition, Staff found out that approval will also be needed by Water Quality Control Board and this language was also added. definition of "reclaimed" water — what about gray water?

5. The penalty provisions of the Ordinances numbers 362 and 29 of the City and GVMID respectively, are now incorporated into the

HOW?

Still hasn't incorporated fines nor due process before termination

Water Use Restrictions

Water use restrictions, both previously in place and newly recommended, shall be effective with the implementation of this plan. Violation of any water use restriction by any customer may shall, after one written warning and in accordance with all applicable laws and legal restrictions, result in the installation of a flow restricting device in the service line of the customer; continued violation shall result in the termination of water service. The customer shall bear the cost of the enforcement action.

may — (after due process)

Excess Use Charges & Penalties

The excess use charge rate structure currently in effect since July 1, 1990, shall remain in effect for the duration of this program unless subsequently changed or amended by the City Council/District Board.

progressive structure - ??

1. Water service of identifiable **Landscape Irrigation Accounts** may be terminated after the First (1st) "excess use charge". Resumption of service may, at the option of the City/District, be ordered restored no earlier than 30 days from the end of the two-month billing period during which the "excess use charge" was incurred.

where?

2. Identifiable **Commercial Accounts:** After the **first** "excess use charge", a commercial account may receive a **First Citation** in accordance with section III (A) (1) of this program. A second consecutive "excess use charge" may result in the issuance of a **Second Citation** in accordance with Section III (A) (2) of this program. In addition to the second Citation, the City/District may also: **a)** install a flow restricting device in the service line of the customer or **b)** terminate the customer's water service. In the event the water service is terminated, the service may be restored upon the payment of the penalty required by section III (A) (3) of this Program.

3. **Residential Accounts:** Upon a second consecutive "excess use charge", a residential account may receive a **First Citation** in accordance with section III (A) (1) of this program. A **third** consecutive "excess use charge" may result in the issuance of a **Second Citation** in accordance with Section III (A) (2) of this program. If a residential account receives a Second Citation, the City/District may: **a)** install a flow restricting device in the service line of the customer or **b)** terminate the customer's water service. In the event the water service is terminated, the service may be restored upon the payment of the penalty required by section III (A) (3) of this Program.

1987 consumption will be reduced by 45%. Hospitals and other health care facilities may be subject to lesser restrictions subject to verification that all conservation measures are in place; such approval shall require an on-site conservation inspection.

Allocation of New Accounts
Initial allocations will be established at 50 gallons per day. These allocations will be re-evaluated after customers have installed retrofit kits provided by Brisbane and GVMID Water Departments. After verification of installation, allocations will be calculated on the basis of the number of documented residents within a household, or, in the case of commercial or industrial customers, on the basis of business data supplied to the Department.

Water Use Restrictions
Water use restrictions, both previously in place and newly recommended, shall be effective with the implementation of this plan. Violation of any water use restriction by any customer shall, after one written warning and in accordance with all applicable laws and legal restrictions, result in the installation of a flow restricting device in the service line of the customer; continued violation shall result in the termination of water service. The customer shall bear the cost of the enforcement action.

Excess Use Charges
The excess use charge structure currently in effect (since July 1, 1990) shall remain in effect. In addition, two consecutive excess use charges shall result in the installation of a flow restricting device in the service line of the customer. A third consecutive excess use charge shall result in the termination of water service.

Mandatory conservation Inspections
Mandatory on-site inspections shall be required of large water consumers, installations not internally metered (i.e. master-metered facilities) and facilities where there is a reasonable indication of water waste. Failure to permit such an inspection shall result in service restriction or termination of service. Leaks identified pursuant to such inspection not repaired within 30 days shall result in a 10% allocation reduction and/or termination of water service.

Exceptions to Rationing Allocations or Water Use Restrictions
Exceptions to rationing allocations or water use restrictions may be made for the protection of public health or safety. Any exceptions are subject to the following requirements and procedures:

1. In the case of a rationing allocation, it must be shown

RESOLUTION NO. 91-53

A Resolution of the City Council of the City of Brisbane Rescinding Resolution No. 91-13 Declaring a Water Shortage Emergency and Adopting a Water Conservation Program

WHEREAS, on May 29, 1990 the City Council of the City of Brisbane adopted Resolution No. 90-34 declaring a Water Shortage Emergency and Adopting a Water Conservation Program putting in place a 25% water conservation program; and

WHEREAS, on March 11, 1991 the City Council of the City of Brisbane adopted Resolution 91-13 declaring a Water Shortage Emergency and adopting a Water Conservation program putting in place a 45% water conservation program; and

WHEREAS, on May 13, 1991 the City Council of the City of Brisbane adopted a motion suspending the water use restrictions applicable under the 45% water conservation program and restoring the restrictions under the 25% program.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Brisbane hereby rescinds Resolution No. 91-13 Declaring a Water Shortage Emergency and Adopting a Water Conservation Program; and

BE IT FURTHER RESOLVED that the Water Conservation Program and water conservation rules, regulations and restrictions put in place by Resolution 90-34 shall remain in force.

22 July 91
Date

Richard Brad Kerwin
Mayor Pro Tempore

I hereby certify that the foregoing Resolution No. 91-53 was duly and regularly adopted at an adjourned regular meeting of the Brisbane City Council on July 22, 1991 by the following vote:

AYES: COUNCILMEMBERS JOHNSON, MILLER, PANZA, Mayor Pro Tempore Kerwin
NOES: COUNCILMEMBERS NONE
ABSENT: MAYOR WALDO

Angelina Reyes
City Clerk

RESOLUTION 93-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE DECLARING AN END TO THE WATER SHORTAGE EMERGENCY AND RESCINDING RESOLUTION 91-13

WHEREAS, the City of Brisbane purchases water from the San Francisco Water Department for resale to customers in the Brisbane Water Service Area; and

WHEREAS, because of drought conditions and the resultant lack of adequate water supply in its system, the San Francisco Water Department implemented a mandatory water rationing program; and

WHEREAS, the City of Brisbane in response to the San Francisco Water Department's water rationing program has implemented its own water conservation program on March 11, 1991; and

WHEREAS, the Governor of the State of California has now proclaimed that the drought in California is officially over.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Brisbane declares an end to the water shortage and rescinds Resolution 91-13 contingent upon the San Francisco Public Utilities Commission adopting on March 23, 1993 to end the mandatory water rationing program.

BE IT FURTHER RESOLVED that if the San Francisco Public Utilities Commission does place an end to such rationing, then no penalties will be levied on City of Brisbane accounts for March or April billings.

LEE J PANZA
Mayor

I hereby certify that the foregoing Resolution No. 93-10 was duly and regularly adopted at a regular meeting of the Brisbane City Council on March 22, 1993 by the following vote:

AYES: COUNCILMEMBERS Johnson, Waldo, Miller, Kerwin, Mayor Panza
NOES: COUNCILMEMBERS None
ABSENT: COUNCILMEMBERS None

ANGELINA REYES
City Clerk

RESOLUTION 2001-48

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRISBANE APPROVING THE BAY AREA WATER USERS ASSOCIATION INTERIM WATER SHORTAGE ALLOCATION PLAN AND THE INTERIM WATER SHORTAGE ALLOCATION PLAN AMONG SUBURBAN PURCHASERS

WHEREAS, the Bay Area Water Users Association Board of Directors has endorsed Water Shortage Allocation Plans; and

WHEREAS, the City Council finds and determine that adoption of said Plans are in the best interest of the City; and

WHEREAS, the Director of Public Works has recommended approval of the Plans,

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Brisbane that the Interim Water Shortage Allocation Plan and the Interim Water Shortage Allocation Plan Among Suburban Purchasers be, and the same hereby are approved.

W. Clarke Conway, Mayor

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Brisbane held on 29th day of May, 2001 by the following vote:

AYES: Councilmembers Bologoff, Conway, Panza, Waldo, and Mayor Conway
NOES: None
ABSENT: None

Sheri Marie Schroeder, City Clerk

APPENDIX G

WATER AND SEWER SYSTEM REVIEW

Suite 115, 201 North Civic Drive
Walnut Creek, California 94596-3864

Tel: (925) 937-9010
Fax: (925) 937-9026

August 25, 2006

BROWN AND CALDWELL

Ms. Judith Malamut
LSA Associates, Inc.
2215 Fifth Street
Berkeley, California 94710

130717-001/1011

Subject: Phase 1 Assistance—Proposed Water and Sewer Mains for the Sierra Point Biotech Project

Dear Ms. Malamut:

In completion of LSA Associates, Inc (LSA) authorization dated May 10, 2006, Brown and Caldwell has estimated preliminary water and sewer demands for the subject project. We also describe needed upgrades needed for the existing systems.

INTRODUCTION

The Sierra Point Biotech Project will consist of biotech research and development, retail, and parking. Table 1 presents our understanding of land use and area together with corresponding flow estimates. In summary, we recommend using an average-day potable water demand of about 0.124 million gallons per day (mgd).

Table 1. Estimated Flows

Use	Water Demand	Area (thousand sq ft)	Total Water Demand (thousand gpd)
Retail	50 gpd / 1000 sq ft	0.003	200 (minimum amount for retail)
Research and Development	10,000 gpd / acre	540	124
Parking	0	1786 spaces	0
Total		0.543	124

Notes:
1. square fee (sq ft)
2. gallons per day (gpd)
3. Unit water demands factors based on water use records for Genentech.

BACKGROUND

The Sierra Point area of Brisbane encompasses about 70 acres along the San Francisco Bay. The Brisbane sewer system also collects sewage from an adjacent area of about 30 acres in the City of South San Francisco (SSF). The Brisbane Sewer Master Plan, completed in May of 2003, presents a projection of the future average sewage flow for the Sierra Point area and adjacent SSF area to of about 0.153 million gallons per day (mgd). The peak day flow with a peaking

factor of 5 to 1 is about 0.765 mgd. This flow is equal to unit rate of about 1,500 gallons per acre per day (gal/acre/day) and 7,500 gal/acre/day respectively for average and peak flow conditions. If the Sierra Point Biotech Park used the same water as a typical commercial development, the 12.6 acres would generate average and peak flows of 0.019 mgd on average, and 0.095 mgd respectively. Sierra Point sewage flows into the Sierra Point Lift Station, with a capacity of 0.461 gpd. The Sierra Point Lift Station transfers raw sewage to the City's Valley Drive Lift Station (firm capacity of 3.2 mgd) from whence it is pumped to the City of San Francisco.

RESULTS

Water will be supplied to the project site through existing 12-inch diameter water main on Sierra Point Parkway and a 16-inch diameter water main that runs along an easement on the southern shore of the Sierra Point Property. A 10-inch diameter water line will connect to Building A from the south. The rest of the buildings on the proposed site will be served through a 10-inch diameter water main loop that will run from the easement north to Sierra Point Parkway. The proposed water line layout is shown on LSA Figure III-12 from the Sierra Point Biotech Project EIR. The 10-inch diameter loop will deliver an adequate maximum daily water demand coincident with the required fire flow.

The required fire flow for the Sierra Point Biotech Project will be established based on Division III of the 2001 California Fire Code (CFC) and with approval of the North County Fire Authority. Based on the Brisbane Water Master Plan (BC, 2003), Sierra Point will require a fire flow of 2,750 gpm for two hours. Hence, fire flow storage will be approximately 0.330 mg. Fire flow storage for the project site will come from overall storage that the City plans for Brisbane 1 and 4, and GVMID 1 at the lower pressure zone. Currently there is no fire storage for the Sierra Point Biotech Project, and all fire flow demands will be drawn directly from SFPUC aqueducts. The City's Water Master Plan recommends adding new storage for the lower lying City area's including Sierra Point. Based on this project, and other proposed development, storage sizing shall be updated to reflect latest system-wide conditions.

The required sewer flow will be approximately 90 percent of the water demand (Brisbane Sewer Master Plan, BC, May 2003). From Table 1, this will result in an average sewer flow of approximately 0.112 mgd for Sierra Point Biotech Park, or a peak flow of 0.560 mgd. As shown in Table 2, the rest of the Sierra Point area will produce a sewage flow of about 0.67 mgd, for a total of 1.23 mgd to the Sierra Point Lift Station. The firm capacity of the pump station (largest pump out of service) is now is about 0.46 mgd; therefore, the additional average future sewer flow of 0.25 mgd can be adequately handled by the pump station. However, at peak conditions, the 1.23 mgd flow would exceed the capacities for the Sierra Point Lift Station. Therefore, it would require renovations with larger pumps or a complete replacement. Additional improvements might include re-work or replacement of the electrical system and a larger standby generator. As stated in the Sewer Master Plan, there is a 10-inch diameter gravity line downstream from the proposed project site. With a projected peak flow of 1.23 mgd, the 10-inch sewer line will flow approximately 90 percent full. Section 5 of the Sewer Master Plan states when the peak flow depth exceeds one-half full for pipelines 10-inches in diameter or less, the 10-inch pipe will need to be replaced. The 12-inch diameter pipe directly downstream from the 10-inch pipeline will flow at about 65 percent. This is acceptable from the Master plan limit

of 66 percent; however, any increase will result in this pipeline also needing to be replaced. The 6-inch diameter force main leaving the pump station is appropriately sized with 2.54 mgd of capacity at a velocity of 10.0 feet per second. From Table 5-4 of the Brisbane Sewer Master Plan, Valley Drive Lift Station has a capacity of 3.2 mgd. The estimated future flows are 2.3 mgd per the Master Plan, allowing for the added 0.465 mgd from Sierra Point Biotech Park, for a total flow of about 2.8 mgd. The 0.465 mgd of sewer flow is the difference between the proposed Sierra Point Biotech Park peak flow of 0.560 mgd, and the Sewer Master Plan peak flow of 0.095 mgd. The 8-inch diameter discharge force main from the Valley Drive Lift Station to Bayshore Blvd has a capacity of about 3.3 mgd with a velocity of 10 feet per second. The force main flows into a 16-inch diameter gravity main in Bayshore Blvd. The 2.8 mgd from the force mains would result in this line flowing at 80 percent. This is above the 66% threshold set in the Sewer Master Plan, therefore requiring a replacement sewer be installed.

Table 2. Estimated Flow for Entire Sierra Point Area

Area		Ave Use (mgd)	Peak Use (mgd)
Sierra Point Area	102 acres	0.153	0.765
Sierra Point Biotech Park Area	12.6 acres	0.019	0.095
Total Use Less Sierra Point Biotech Park		0.134	0.670
Sierra Point Biotech Park Use Based on RD Water Demands	10,000 gpd/acre	0.112	0.560
Total		0.246	1.230

If you have any questions regarding this analysis, please call me at (925) 210-2352.

Very truly yours,

BROWN AND CALDWELL

Thomas Birmingham
Project Manager

TB:iu:dt

cc: R. Breault, City of Brisbane
J. Flanagan, City of Brisbane
W. Faisst, Brown and Caldwell