VOLUME I OF III

FINAL ENVIRONMENTAL IMPACT REPORT

BIG WAVE WELLNESS CENTER AND OFFICE PARK PROJECT

Lead Agency:
County of San Mateo
Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063

SCH No. 2008102109
October 2010

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AND OFFICE PARK
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Lead Agency:

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Planning and Building Department
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October 2010

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I. INTRODUCTION

This document, together with the Big Wave Wellness Center and Office Park Project Draft Environmental Impact Report (Draft EIR) which is incorporated by reference, constitutes the Big Wave Wellness Center and Office Park Final Environmental Impact Report (FEIR).

The County of San Mateo (the "County") has prepared this FEIR for the Big Wave Wellness Center and Office Park Project in accordance with Sections 15088, 15089, and 15132 of the California Environmental Quality Act (CEQA) Guidelines. The FEIR is an informational document that must be considered by decision makers before approving or denying the Big Wave Wellness Center and Office Park Project (proposed project). Pursuant to Section 15132 of the *California Environmental Quality Act (CEQA) Guidelines*, this FEIR consists of: (a) Corrections and Additions to the Draft EIR, (b) a list of persons and organizations that commented on the Draft EIR, (c) comments received on the Draft EIR, (d) the County's responses to significant environmental points raised in the review and consultation process, and (e) any other information added by the County.

This Introduction Section describes the organization of the FEIR and summarizes the EIR review, certification and project approval process.

The FEIR is also posted on the Planning Department's web site (http://www.co.sanmateo.ca.us/portal/site/planning). Once at the website, click on "Pending Projects/EIR" icon, then click on the "Big Wave Final EIR" link.

A copy of the Final EIR can also be obtained at the following address:

County of San Mateo Planning and Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063

A. ORGANIZATION OF THIS FINAL EIR

This document has been published in a set of three volumes, as described below:

Volume I contains Sections I through VI. Following this introduction (**Section I**), **Section II (Response to Comments)** contains a list of persons and organizations that submitted written comments on the Draft EIR, the comments letters, and responses to those comments, **Section III** (**Corrections and Additions to the Draft EIR**) presents minor changes to the project description since the publication of the Draft EIR and revisions that have been made to the Draft EIR as a result of comments received from organizations and individuals on the document, **Section IV** (**Mitigation Monitoring and Reporting Program**) contains the Mitigation Monitoring and Reporting Program for the proposed project, **Section V** (**Preparers of the Final EIR**), lists persons involved in the preparation of this Final EIR, and **Section VI** (**Bibliography**).

Volumes II and III contain all comments and response to comments on the Draft EIR. Specifically, Volume II contains Comment Letters 1 through 190 and responses to those comment letters. Volume III contains Comment Letters 191 through 245 and responses to those comment letters.

The Appendices to the FEIR has been provided on a compact disc at the back of Volume I of the FEIR.

B. PROJECT LOCATION AND SUMMARY

The 19.4-acre project site is located on Airport Street, northwest of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County and comprises two Assessor's Parcel Numbers (APN) 047-311-060 and APN 047-312-040. The Big Wave Office Park would be constructed on APN 047-311-060 ("northern parcel"), which is approximately 14.25 acres in size. The Big Wave Wellness Center would be constructed on APN 047-312-040 ("southern parcel"), which is approximately 5.28 acres.

The proposed Big Wave Wellness Center would provide housing and employment opportunities for low-income developmentally disabled (DD) adults. The Office Park project would be occupied by private firms, but would receive services from Big Wave businesses based out of the Wellness Center.

The Office Park property (northern parcel) would consist of four, three-story buildings (225,000 sq. ft. total) planned for mixed office use and a 640-space parking lot. The Wellness Center property would consist of two buildings (a 3-story building and a one-story building), containing a maximum of 57 units for a maximum 50 DD adults and 20 live-in staff members, approximately 10,000 sq. ft. of commercial public storage uses, 4,000 sq. ft. of communications uses, 4,000 sq. ft. of composting and private storage uses, as well as onsite living and recreation facilities, associated fencing, and a 50-space parking lot.

In addition to these above primary components, the proposed project includes: development of an onsite trail system; restoration of wetland habitat; use of sustainable organic/non-organic, onsite/offsite farming for supplemental food sources; a native plant nursery for revegetation/landscaping efforts; recycling and composting; dog walking and grooming services; and development of bus stops and shuttle services. Proposed utilities and service systems include: solar cells for heating/energy; carbonate fuel cells; back–up natural gas generators; wind turbines and generators; geothermal cooling systems; and pervious pavement parking lots.

Options for water systems are clarified in the FEIR as follows: (1) domestic hook-ups or (2) use of well water/treatment systems. Water supply for fire protection will be rely one or a combination of on-site and municipal sources as approved by the Coastside County Fire Protection District.

Options for wastewater systems are clarified in the FEIR as follows: (1) use of an onsite wastewater treatment plant with disposal through a combination of municipal hook-up and on-site recycled water usage, and/or (2) municipal hook-ups.

All buildings and development would be designed to meet Platinum-level Leadership in Energy and Environmental Design (LEED) certified construction.

Further, various project-related business operations are included, such as: Big Wave (BW) Catering/Food Services; BW Energy; BW Farming; BW Water; BW Transportation; BW Recycling; BW Communications (radio telecom link); and BW Maintenance.

C. ENVIRONMENTAL REVIEW PROCESS

CEQA encourages "wide public involvement, formal and informal... in order to receive and evaluate public reactions to environmental issues…" (Section 15201 of the CEQA Guidelines).

Pursuant to CEQA Guidelines Section 15063, the County prepared a preliminary Initial Study, which concluded that the originally proposed project could result in potentially significant environmental impacts and an EIR would be required. The County circulated a Notice of Preparation (NOP) for the original Draft EIR (DEIR) for the proposed project to the State Clearinghouse and interested agencies and persons on November 5, 2008 for a 30-day review period and conducted an EIR Scoping Meeting on November 18, 2008. Comments received on the NOP and comments received at the public scoping meeting were both considered in the preparation of the DEIR.

The DEIR for the proposed project was made available to various public agencies, citizen groups, and interested individuals for a 64-day public review period from October 22, 2009 through December 24, 2009. The DEIR was circulated to State agencies through the State Clearinghouse of the Governor's Office of Planning and Research. Copies of a Notice of Availability (NOA) of the DEIR were also sent to citizens residing near the project site, interested groups, and agencies and were published in the Half Moon Bay Review and the San Mateo Times. Copies of the DEIR were also made available for review at the County of San Mateo Planning and Building Department and the Half Moon Bay Library. Further, the DEIR was posted on the County Planning and Building Department website at:

http://www.co.sanmateo.ca.us/portal/site/planning/menuitem.2ca7e1985b6c8f5565d293e5d17332a0/?vgnextoid=322ee49d33974210VgnVCM1000001937230aRCRD&cpsextcurrchannel=1

On November 18, 2009, the San Mateo County Planning Department held a public hearing on the proposed project at which time Planning Department staff gave a presentation on the proposed project and the DEIR and members of the public submitted oral testimony on the proposed project and the DEIR.

The purpose of the review period is to provide interested public agencies, groups and individuals the opportunity to comment on the adequacy of the DEIR and to submit testimony on the possible environmental effects of the proposed project. This document, together with the DEIR, makes up the Final EIR as defined in the *State CEQA Guidelines* Section 15132.

As Lead Agency under CEQA, the County of San Mateo must provide each public agency that commented on the Draft EIR with a copy of its responses to comments at least ten days before certifying the Final EIR. In addition, the Lead Agency may also provide an opportunity for members of the public to review the Final EIR before certification, although this is not a requirement of CEQA.

D. USE OF THIS DOCUMENT

The FEIR allows the public and County decision makers to review revisions to the DEIR, comments, and responses to comments before consideration of the project. This FEIR and the DEIR will serve as the environmental document used by the County when considering approval of the project. Before it may approve the project, the Planning Commission must make the following three certifications (CEQA Guidelines, Section 15090).

- *The Final EIR has been completed in compliance with CEQA.*
- *The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.*
- *The Final EIR reflects the Lead Agency's independent judgment and analysis.*

In addition, because the FEIR concludes that the project could have one or more significant environmental impacts, the Planning Commission must adopt findings of fact (CEQA Guidelines, Section 15091(a)). For each significant impact, the Planning Commission must make one of the following findings:

- *Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR.*
- *Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*
- *Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.*

Each finding must be accompanied by a brief explanation of the rationale for the finding. In addition, the Planning Commission must adopt, in conjunction with the findings, a program for reporting or monitoring the changes that it has either required in the project or made a condition of approval to avoid or substantially lessen impacts (CEQA Guidelines, Section 15091(d)). These measures must be fully enforceable through permit conditions, agreements, or other measures. This program is referred to as the Mitigation Monitoring and Reporting Program (MMRP).

II. RESPONSE TO COMMENTS

A. OVERVIEW

The purpose of the public review of the Draft Environmental Impact Report (DEIR) is to evaluate the adequacy of the environmental analysis in terms of compliance with the California Environmental Quality Act (CEQA). Section 15151 of the *CEQA Guidelines* states the following regarding standards against which adequacy is judged:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have not looked for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*

The purpose of each response to a comment on the DEIR is to address the significant environmental issue(s) raised by each comment. This typically requires clarification of points contained in a DEIR. Section 15088(b) of the *CEQA Guidelines* describes the evaluation that CEQA requires in the response to comments. It states that:

> *The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.*

Section 15204(a) (Focus of Review) of the *CEQA Guidelines* helps the public and public agencies to focus their review of environmental documents and their comments to lead agencies. Case law has held that the Lead Agency is not obligated to undertake every suggestion given them, provided that the agency responds to significant environmental issues and makes a good faith effort at disclosure. Section 15204.5(a) of the *CEQA Guidelines* clarifies this for reviewers by stating:

> *In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of*

> *an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a Lead Agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.*

This guideline directs reviewers to examine the sufficiency of the environmental document, particularly in regard to significant effects, and to suggest specific mitigation measures and project alternatives. Given that an effect is not considered significant in the absence of substantial evidence, subsection (c) advises reviewers that comments should be accompanied by factual support. Section 15204(c) of the *CEQA Guidelines* states:

> *Reviewers should explain the basis for their comments, and, should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence.*

B. LIST OF THOSE WHO COMMENTED ON THE DRAFT EIR

The County of San Mateo (the "County") received a total of 243 comment letters on the DEIR during the public review period. It should be noted that these 243 comment letters include multiple comment letters from some individuals and agencies. Each comment letter has been assigned a corresponding number, and comments within each comment letter are also numbered. Comments within each comment letter are indexed using the "Letter number-Comment number" format, where each comment in Letter 1 is indexed as 1-1, 1-2, 1-3, etc., and each comment in Comment Letter 2 is indexed as 2-1, 2-2, 2-3, etc.

Written comments made during and after the public review of the DEIR intermixed points and opinions regarding the project's merits with points and opinions regarding potentially significant environmental effects of the project. The responses acknowledge comments addressing points and opinions regarding the project's merits, and discuss as necessary the points relevant to the environmental review required by CEQA. During the 64-day public review period, the following organizations/persons provided written and oral comments on the DEIR to the County:

	Commenters	**Date**
1.	Midcoast Community Council, Sabrina Brennan	October 23, 2009
2.	Committee for Green Foothills, Lennie Roberts	October 23, 2009
3.	Robert Brown	October 29, 2009
4.	dotnorris@comcast.net (Full Name Not Provided)	October 29, 2009
5.	Kevin Cooke	October 29, 2009

6.	Tyson Wood	October 29, 2009
7.	Pete Fingerhut	October 30, 2009
8.	Carol Adame	November 1, 2009
9.	Laslo Vespremi	November 1, 2009
10.	Midcoast Community Council, Sabrina Brennan	November 1, 2009
11.	County of San Mateo, Office of the Sheriff, James Ache	January 12, 2010[1]
12.	Dianna Carthew	November 2, 2009
13.	Ed Bierdeman	November 2, 2009
14.	Eileen Fingerhut	November 2, 2009
15.	Iris Rogers	November 2, 2009
16.	Laslo Vespremi	November 2, 2009
17.	Pillar Ridge Homeowners Association, Lisa Ketcham	November 2, 2009
18.	Mike Hagmaier	November 2, 2009
19.	Robert Brown	November 2, 2009
20.	Jack Sutton	November 3, 2009
21.	Kathleen Reece	November 3, 2009
22.	Martha Kaine	November 3, 2009
23.	Todd Reece	November 3, 2009
24.	Name Illegible	November 4, 2009
25.	Barbara White	November 4, 2009
26.	Name Illegible	November 4, 2009
27.	Elizabeth Daly-Caffell	November 4, 2009
28.	George H. Horbal	November 4, 2009
29.	Linda Johnson	November 4, 2009
30.	Lynne Magee	November 4, 2009
31.	Nadia Bledsoe Popyack	November 4, 2009
32.	Nell Riley	November 4, 2009
33.	Olga Polansk	November 4, 2009
34.	Sabrina Brennan	November 4, 2009
35.	Sari Ditlevsen	November 4, 2009
36.	Sharon Dardenelle	November 4, 2009

[1] *Out of date sequence.*

37.	Steve Reid	November 4, 2009
38.	Granada Sanitary District, Jonathan Wittwer	November 4, 2009
39.	Pillar Ridge Homeowners Association, Lisa Ketcham	November 4, 2009
40.	California Coastal Commission, Ruby Pap	November 4, 2009
41.	Pamela Perry	November 4, 2009
42.	Carlysle Young	November 5, 2009
43.	Committee for Green Foothills, Lennie Roberts	November 5, 2009
44.	Jennifer Castner	November 5, 2009
45.	Midcoast Community Council, Sabrina Brennan	November 5, 2009
46.	Darin Boville	November 6, 2009
47.	Darin Boville	November 9, 2009
48.	Gary Naman	November 9, 2009
49.	James Larimer	November 9, 2009
50.	Matthew Collins	November 9, 2009
51.	Stacy Sabol	November 9, 2009
52.	Kathryn Slater-Carter	November 10, 2009
53.	Laslo Vespremi	November 11, 2009
54.	Wittwer and Parkin, LLP, Ryan Moroney	November 11, 2009
55.	John Lynch	November 16, 2009
56.	Kevin and Wendy Stokes	November 16, 2009
57.	Sierra Club Loma Prieta Chapter Coastal Issues Committee, Ken King	November 16, 2009
58.	Victoria and Paul Kojola	November 16, 2009
59.	Tim Myers	November 16, 2009
60.	Reba Vanderpool	November 16, 2009
61.	Anne Westerfield	November 17, 2009
62.	Bill and Peggy Bechtell	November 17, 2009
63.	Carol Guion	November 17, 2009
64.	Chris MacIntosh	November 17, 2009
65.	Cynthia Stern	November 17, 2009
66.	Deborah Lardie	November 17, 2009
67.	Denise Phillips	November 17, 2009
68.	Janet Kern	November 17, 2009
69.	Joe and Pam Gibson	November 17, 2009

70.	Leah Champion	November 17, 2009
71.	Marie and Alan Brennan	November 17, 2009
72.	Rick Harding	November 17, 2009
73.	Annette Saunders	November 17, 2009
74.	Montara Water and Sanitary District, Clemens Heldmaier	November 17, 2009
75.	Darin Boville	November 17, 2009
76.	Matthew Collins	November 17, 2009
77.	Michael Pahre	November 17, 2009
78.	Len Erickson	November 17, 2009
79.	Rick Harding	November 17, 2009
80.	Lee McKusick	November 18, 2009
81.	Neil Merrilees	November 18, 2009
82.	Peninsula Open Space Trust, Walter Moore	November 18, 2009
83.	Leslie O'Brien	December 23, 2009[2]
84.	Petition	November 18, 2009
85.	Carlysle Ann Young	November 18, 2009
86.	Barry Lifland	November 19, 2009[3]
87.	Laslo Vespremi	November 20, 2009
88.	Jack Sutton	November 20, 2009
89.	Jose Acosta	November 23, 2009
90.	Midcoast Community Council, Sabrina Brennan	November 23, 2009
91.	Deborah Wong	November 24, 2009
92.	Midcoast Community Council, Sabrina Brennan	November 24, 2009
93.	Jack Myers	November 24, 2009
94.	Mr. and Mrs. Lincoln Wallace	November 30, 2009
95.	Adams Broadwell Joseph and Cardozo, Tanya Gulesserian	November 30, 2009
96.	Laslo Vespremi	December 2, 2009
97.	Pete Fingerhut	December 2, 2009
98.	Lisa Ketcham	December 2, 2009
99.	Cid Young	December 2, 2009

[2] *Out of date sequence.*

[3] *Out of date sequence.*

100.	Sabrina Brennan	December 3, 2009
101.	Montara Water and Sanitary District, Paul Perkovic	December 3, 2009
102.	Marilyn Townsend	December 4, 2009
103.	Laslo Vespremi	December 4, 2009
104.	Mike Hagmaier	December 4, 2009
105.	Juliette Arnold	December 7, 2009
106.	Lucy Rodriguez	December 7, 2009
107.	Martha Cravens	December 7, 2009
108.	Noah and Adrian Mallinger	December 7, 2009
109.	Sally Green	December 7, 2009
110.	Stephanie Willis	December 7, 2009
111.	Susan Thomas	December 7, 2009
112.	Vineet Buch	December 7, 2009
113.	Steve Blackwood	December 7, 2009
114.	Sabrina Brennan	December 7, 2009
115.	Darin Boville	December 7, 2009
116.	Debbe Kennedy	December 7, 2009
117.	California Pilots Association, Ed Rosiak	December 7, 2009
118.	Melinda and Norishige Takeuchi	December 21, 2009[4]
119.	Pete Fingerhut	December 7, 2009
120.	Eileen Fingerhut	December 7, 2009
121.	Law Offices of David E. Schricker, David Schricker	December 10, 2009
122.	Linda Theroff	December 10, 2009
123.	Marcella Russell	December 10, 2009
124.	Mary Larenas	December 10, 2009
125.	Tom Bruce	December 10, 2009
126.	Betty Loman	December 14, 2009
127.	Chris Nicola	December 14, 2009
128.	David Solhaug	December 14, 2009
129.	David Theroff	December 14, 2009
130.	Gary Horsman	December 14, 2009

[4] *Out of date sequence.*

131.	Kathleen Conroy	December 14, 2009
132.	Matt Brown	December 14, 2009
133.	Name Illegible	December 14, 2009
134.	Scott Graham	December 14, 2009
135.	Darin Boville	December 15, 2009
136.	Kathy Affeltranger-Loas	December 15, 2009
137.	Mary Lou Williams	December 15, 2009
138.	Steve Fischer	December 15, 2009
139.	Teri Chatfield	December 15, 2009
140.	Mary J. Clemens	December 16, 2009
141.	Yuri Daher	December 16, 2009
142.	Jennifer Ganiza	December 17, 2009
143.	Sabrina Brennan	December 17, 2009
144.	Sabrina Brennan	December 17, 2009
145.	Valerie Shaw	December 17, 2009
146.	Ben Pacifico	December 21, 2009
147.	Carol Guion	December 21, 2009
148.	Craig Haberlein	December 21, 2009
149.	Deborah and Michael Wong	December 21, 2009
150.	Half Moon Bay Coastside Foundation, Oscar Braun	December 21, 2009
151.	Hank Galindo	December 21, 2009
152.	Holly Winnen	December 21, 2009
153.	Kim Gainza	December 21, 2009
154.	Kevin Ochoa	December 21, 2009
155.	Mike Iacopi	December 21, 2009
156.	Mike Trautman	December 21, 2009
157.	Pamela Eakins, Kate Haisch, and Jason Black	December 21, 2009
158.	Reez Aikawa	December 21, 2009
159.	Robert Murray	December 21, 2009
160.	Robert Varner	December 21, 2009
161.	Shauna Harris	December 21, 2009
162.	County of San Mateo, Office of the Sheriff, Lt. Ed Barberini	December 21, 2009
163.	Valerie Griffin	December 21, 2009

164.	William Botieff	December 21, 2009
165.	Andrea Gainza	December 22, 2009
166.	Aircraft Owners and Pilots Association, John Collins	December 22, 2009
167.	Avis Boutell	December 22, 2009
168.	Bryan Trujillo	December 22, 2009
169.	Department of Transportation, Division of Aeronautics, Sandy Hesnard	December 22, 2009
170.	Gary Naman	December 22, 2009
171.	George Horbal	December 22, 2009
172.	Iris Rogers	December 22, 2009
173.	James Keller	December 22, 2009
174.	Jamie Russell	December 22, 2009
175.	Janet Didur	December 22, 2009
176.	Jay Davis and Nicole David	December 22, 2009
177.	John Kresge	December 22, 2009
178.	Lauryn Agnew	December 22, 2009
179.	Lifehouse, Inc., Nancy Dow Moody	December 22, 2009
180.	Linda Johnson	December 22, 2009
181.	Maureen Hawkins	December 22, 2009
182.	Michael Antone	December 22, 2009
183.	Neil Merrilees	December 22, 2009
184.	P. A. Chimienti	December 22, 2009
185.	Pillar Ridge Homeowners Association, Lisa Ketcham	December 22, 2009
186.	Sandy Gainza	December 22, 2009
187.	Sonya Jason and Stacy Sabol	December 22, 2009
188.	Thijs Kaper	December 22, 2009
189.	Aimee Luthringer	December 23, 2009
190.	Barry Lifland	December 23, 2009
191.	Cal-Fire, Clayton Jolley	December 23, 2009
192.	City/County Association of Governments of San Mateo County, David Carbone	December 23, 2009
193.	Committee for Green Foothills, Lennie Roberts	December 23, 2009
194.	Ellen James	December 23, 2009
195.	Jack Sutton	December 23, 2009

196.	Joe Ovalle	December 23, 2009
197.	Josh Berry	December 23, 2009
198.	Kevin Cooke	December 23, 2009
199.	Leslie O'Brien	December 23, 2009
200.	Merrill Bobele	December 23, 2009
201.	Michele Oldman	December 23, 2009
202.	Richard Tabor	December 23, 2009
203.	Sandy Emerson	December 23, 2009
204.	Scott Holmes	December 23, 2009
205.	Shute, Mihaly and Weinberger, LLP, Winter King (on behalf of the Committee for Green Foothills)	December 23, 2009
206.	San Mateo County League for Coastside Protection, Dana Kimsey	December 23, 2009
207.	Steve Beardsley	December 23, 2009
208.	Ted Kaye	December 23, 2009
209.	Wittwer and Parkin, LLP, Jonathan Wittwer (on behalf of Granada Sanitary District)	December 23, 2009
210.	Arne Byfuglin	December 24, 2009
211.	Balance Hydrologics, Inc., Mark Woyshner	December 24, 2009
212.	Bern Smith	December 24, 2009
213.	California Coastal Commission, Madeline Cavalieri	December 24, 2009
214.	Carol Kaminski	December 24, 2009
215.	Darin Boville	December 24, 2009
216.	Deirdre Meola	December 24, 2009
217.	Diane Brosin and Tim Machold	December 24, 2009
218.	Dorothy Norris	December 24, 2009
219.	Edward Davis	December 24, 2009
220.	Glen Silva	December 24, 2009
221.	John Duff	December 24, 2009
222.	Judith and Mois Macias	December 24, 2009
223.	Kathryn Burke	December 24, 2009
224.	Kent Roberts	December 24, 2009
225.	Kent Roberts and Carlysle Young	December 24, 2009
226.	Len Erickson	December 24, 2009

227.	Mary Flint	December 24, 2009
228.	Mary Larenas	December 24, 2009
229.	Michael Bouons	December 24, 2009
230.	Midcoast Community Council, Neil Merrilees	December 24, 2009
231.	Montara Water and Sanitary District, Tatyana Yurovsky	December 24, 2009
232.	Mauro Di Nucci	December 24, 2009
233.	Patrick Armstrong	December 24, 2009
234.	Renee St. Louis	December 24, 2009
235.	Rich Miller	December 24, 2009
236.	Richard Eriksson	December 24, 2009
237.	Richard Southern	December 24, 2009
238.	Area 29, Sabrina Brennan	December 24, 2009
239.	Samuel and Germanie Weinberg	December 24, 2009
240.	Surfrider Foundation, Sarah Damron	December 24, 2009
241.	Terry Gossett	December 24, 2009
242.	T. J. Glauthier and Brigid O'Farrell	December 24, 2009
243.	Correspondence from California State Clearinghouse and Planning Unit	Nov. 19 and Dec. 28, 2009
244.	California Department of Transportation, Lisa Carboni	January 5, 2010
245.	Wittwer and Parkin, LLP, Jonathan Wittwer (on behalf of Granada Sanitary District)	December 30, 2009

II. RESPONSE TO COMMENTS
C. TRANSCRIPT OF THE NOVEMBER 18, 2009 PLANNING COMMISSION MEETING AND RESPONSE TO COMMENTS RECEIVED

Full Transcription of November 18, 2009

Planning Commission Public Hearing

(The public hearing comments start on page 55 of the transcription)

SAN MATEO COUNTY PLANNING COMMISSION

MEETING OF

WEDNESDAY, NOVEMBER 18, 2009

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Staff:

Ms. Grote, Mr. Nibbelin, Mr. Shu

Project Planner:

Camille Leung

Public Speakers:

Jeff Peck, Scott Holmes, David Byers, Kathryn Slater-Carlin, Sabrina Brennan, Lisa Ketcham, Kevin Cooke, Lennie Roberts, Laslo Vespremi, Judy Taylor, Marc Passen, Lisa McCaffrey, Leslie Deman, Kerry Burke, Ryan Moroney, Gregory Off, Francisco Castaneo, Holly Winnen, Naomi Patridge, Dave Worden, Paul Perkovic, Carl Yoshimine, Richard Johnson, David Beuerman, Karen Holmes, Jon Yoshimine, Marina Fraser, Ruth Sowle, Aimee Luthringer, Pam Sayles, Neil Merrilees, Mary Larenas, Iris Rogers, Dorothy Norris, David Vespremi, William Botieff, Debby Lesser, Lisa

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CHAIRMAN RANKEN: Okay. I would like to call to order the planning commission meeting, County of San Mateo, Wednesday, November 18, 2009.

Let's start with a salute to the flag.

(Pledge recited.)

CHAIRMAN RANKEN: May I have the roll call please, Rosario.

ROSARIO: Yes.

Good morning.

Commissioner Bomberger.

COMMISSIONER BOMBERGER: Here.

ROSARIO: Commissioner Dworetzky.

COMMISSIONER DWORETZKY: Here.

ROSARIO: Commissioner Ranken.

CHAIRMAN RANKEN: Here.

ROSARIO: Commissioner Slocum.

COMMISSIONER SLOCUM: Here.

ROSARIO: Commissioner Wong.

COMMISSIONER WONG: Here.

ROSARIO: Thank you.

CHAIRMAN RANKEN: Thank you.

We can start with oral communications. This is a portion of the agenda that is open to the public to speak on anything within our subject

matter jurisdiction but is not on the agenda. Of course, I assume most of you are here for the Big Wave project. If there is anyone who wants to speak on anything other than that, now is the opportunity.

Is anyone interested in that?

Okay. I'll close oral communications, and we'll move on to our business. Next item is consideration of the minutes for our last meeting. We actually -- this is for November 4, 2009.

This is (inaudible).

Any motions?

UNIDENTIFIED COMMISSIONER: I move for approval.

UNIDENTIFIED COMMISSIONER: Second.

CHAIRMAN RANKEN: Motion seconded.

Any discussion on the minutes?

All those in favor of the minutes?

UNIDENTIFIED COMMISSIONER: Aye.

UNIDENTIFIED COMMISSIONER: Aye.

UNIDENTIFIED COMMISSIONER: Aye.

UNIDENTIFIED COMMISSIONER: Aye.

UNIDENTIFIED COMMISSIONER: I abstain.

CHAIRMAN RANKEN: All those opposed?

So we have four in favor and zero opposed

and one abstention.

Okay. Well, let's get straight to the reason you're all here. First of all, it's wonderful to see such a good crowd here. It's one of the things that makes our job more rewarding, when we see how much the community cares about the issues that come in front of us and in front of them as well.

Again, it's very nice to see all the public interest, and we appreciate your being here. And we'll now move ahead with the staff report.

Rosario.

ROSARIO: Yes. Owner/Applicant, Item No. 5, Big Wave Group, LLC, File No. PLN 2005-00481 and PLN20050-0482. Location, Airport Street at Stanford Avenue, Princeton. Project planner Camille Leung.

MS. LEUNG: Good morning, Chairman Ranken and members of the planning commission.

The purpose of this informational public hearing is to provide interested parties an opportunity to present comments to the planning commission during the public review period for the Big Wave Wellness Center Office Park Draft EIR. It should be noted that no decision will be made at

this hearing.

Christopher A. Joseph and Associates, or CAJA, the County's EIR consultant for this project, in consultation with County staff, prepared the Draft EIR.

Jeff Riley from CAJA is here, and will be available for any questions.

The Draft EIR was made available for public review on October 22, 2009, with an original comment period end date of December 7, 2009. Since its release, the comment period has been extended twice as shown in this slide.

Earlier this month the public review period was extended from a minimum 45-day comment period for CEQA to 62 days by the community development director based on requests from the public for additional time to review the document, the Draft EIR.

Within a short amount of time the review period was further extended to 64 days due to inadvertent omission of Chapter IV.N, the utilities chapter, from hard copies of -- just hard copies of the Draft EIR. The County determined that a 64-day review period would be appropriate, giving persons who received a hard copy of the Draft EIR 45 days

to review the missing chapter.

It should be noted that the chapter has been available on the planning -- from the Planning Department's website since the start of the review period.

Based on these extensions, the public comment period will end on December 24, 2009. The second planning commission hearing for consideration of both the DEIR and the project is tentatively scheduled for February 24, 2010.

Copies of the Draft EIR have been available at the following locations: The Planning Department's website, the Planning Department's counter, as well as the Half Moon Bay library.

Now I'll provide a brief overview of the project. As shown on this slide, the project site consists of two parcels located within the Princeton area of unincorporated San Mateo County. The project site in total is 19.4 acres. It's the two parcels outlined in yellow on the slide.

The northern parcel is 14.25 acres, and that's where the office park is proposed. And the southern parcel to the right is 5.28 acres, and is where the wellness center is proposed.

You'll notice that the Half Moon Bay

Airport is located right here, Princeton is right here, and Pillar Ridge Mobile Home Park is located here. The Fitzgerald Marine Reserve is out here.

Let's see.

Now I'll review the zoning for the properties. The two parcels are both located in the Coastal Development District. The two zoning districts cover -- two zoning districts cover the northern parcel. The majority of the parcel is M-1/DR/CD for light industrial design review Coastal Development District, and a portion along Airport Street is zoned light industrial airport overlay -- that's the difference, "airport overlay" -- design review and Coastal Development District.

Two zoning districts also cover the southern parcel. The majority of the parcel is W/DR/CD for Waterfront Design Review Coastal Development District, and a portion along Airport Street has the AO, airport overlay, zoning included.

Both sites have a general land designation of general industrial.

The project site is characterized by a number of different constraints. The office park

section in the slide contains a 120-foot wide airport overlay, as I mentioned before, as well as on-site wetlands, shown in dark blue, within the property lines; as well as a 100-foot wetlands buffer zone shown in light blue, and an (inaudible) earthquake fault line shown in orange.

As proposed, the office park site would be subdivided into five parcels, one for each of the proposed buildings, and then one to cover the common areas, the communications building along Airport Street, as well as the 640 square -- sorry, 640-space parking lot.

Each office building would be three stories in height and 225,000 square feet in size. The total height of the buildings would be 45 feet, 6 inches. The buildings would be occupied by mixed office users.

Similar to the office park site, the wellness center site contains a variety of constraints. 120-foot wide airport overlay area along Airport Street, on-site wetlands shown in dark blue, a 100-foot wetlands buffer is shown in light blue. Unlike the office park parcel there is no (inaudible).

The wellness center would provide a maximum

of 70 housing units for approximately 50 developmentally disabled adults and 20 live-in staff members. Residential units are provided in Building 1 as shown here, as well as three separate units in Buildings 2, 3, 5, 6, and 7, which are shown here.

The facilities would provide employment opportunities for the disabled residents as well as a limited community fitness center in Building 1 to include a school, fitness center, and (inaudible).

Building heights for Building 1 vary from about 30 to 35 feet. This is just one example at 33 feet, 3 inches. The breezeway unit would be 15 feet, 10 inches. An example is shown here.

And the storage building along Airport Street would be 36 feet.

The (inaudible) zoned property would be subdivided by three lots. Lot 1 would include a 20,000 square foot storage building, Lot 2 would include all the buildings in the wellness center, and lot 3 would include the 73-space parking area.

I'll now review the required County permits for the project. The project requires approval of a major subdivision for each property, a design review permit for all the proposed structures and

proposed grading, and a grading permit to perform 22,745 cubic yards of balanced cut and fill.

The wellness center proposal by itself requires a use permit for a modern sanitarium, and the office park proposal requires an off-street parking exception to allow 640 parking spaces where 735 spaces would be required by our parking (inaudible).

The location of the parcel in a coastal zone also requires a coastal zone permit, which is appealable to the Coastal Commission once local review is made.

I will now provide a brief summary of the impact identified in the Draft EIR. It should be noted that mitigation measures included in the Draft EIR are intended to reduce all potentially significant impacts to a less than significant level.

Visual -- I'll now talk about the aesthetic section. Visual simulations of the proposed project were prepared for viewing location along Airport Street; Airport Street at Stanford; West Point Avenue, which is a road southwest of the site shown here. West Point Avenue. As well as the North Trail located right here above the Pillar

Ridge Mobile Home Park, as well as from Highway 1 out here.

Views 1-A and 1-B in the Draft EIR illustrate views of the project site from Airport Street with two different landscaping scenarios. View 1-A shows landscaping just planted after construction, and View 1-B shows landscaping 15 years with full growth of the vegetation. So it shows here that the building is obscured by (inaudible).

View 2-A and 2-B show the same landscaping scenarios from Airport Street at Stanford, one after construction and one 15 years later.

Views 3-A and 3-B show landscaping -- the two landscaping scenarios from West Point Avenue southwest of the site. The views aren't that much different from each other. One directly after construction, one 15 years down the line.

Views 4-A and 4-B show the same scenarios from the North Trail, which is northwest of the mobile home park. And you can see the project right here right after construction and then 15 years after.

Views 5-A and 5-B show the same landscaping scenarios from Highway 1, and you can see the

project right here with full tree growth 15 years later in the bottom view.

Regarding biological resources, development on the project has the potential to indirectly impact special status wildlife species such as the Western Painted Turtle, the San Francisco Garter Snake, and the California Red-Legged Frog, as well as bird species due to the availability of suitable habitat in the immediate vicinity of this project.

Mitigation measures require the applicant to (inaudible) disturbance activity so to minimize habitat disturbance and to work with a qualified biologist to monitor the site prior to and at the end of construction.

Regarding cultural resources, as currently proposed, the development of the wellness center site would occur within the mapped boundaries of an archeological site. Mitigation Measure Cultural 2-A requires the applicant to either redesign the project to avoid the cultural site -- and I'm not telling you where exactly the site is due to trying to protect the integrity of the site -- either to redesign the project to avoid the cultural site or to retain County-approved archeologists to conduct test excavations at the site to determine the

integrity of the cultural deposits at the site and to develop plans to minimize impact to those valued resources.

The applicant has indicated that they plan to redesign, to go with that first option of redesigning the project, to avoid the cultural site.

Regarding geology and soils, CAJA's subconsultants, Triquil and Brolo (phonetic), reviewed the available subsurface data and was able to complete that this project is feasible from a geotechnical standpoint. Mitigation measures require the preparation of final geotechnical investigation for the project to address potential impacts of -- as well as design (inaudible) to address very strong or very violent ground shaking, seismic hazard, and expansive near-surface soil. All mitigation measures would be implemented prior to construction.

Regarding hazards and hazardous materials, the proposed communications building on the office park site located within the airport overlay area, as well as the storage building on the wellness center site, also located in the airport overlay setback. So that would be located within that back

area. And consistent with the AO setback requirement, the structures would not include any residential uses, and would be limited to three or more persons occupying either building at any one time.

Mitigation measure Hazard 3 requires a navigational easement be established for the project site to ensure (tape skipped) to airport traffic at Half Moon Bay Airport.

Regarding groundwater, projected recharge after the project implementation is anticipated to be similar to the existing groundwater recharge at the site (inaudible), as all the impervious surfaces that are proposed for the two sites would be drained to permeable areas on the site. Therefore, project impact to groundwater recharging is expected to be less than significant and no mitigation measure is required.

Regarding (inaudible) people or obstructions to inundation by seiche, tsunami, or mud flow, tsunami maps prepared by ABAG show that the project would place residential and commercial structures within a vast tsunami area.

Mitigation Measure Hydrology 9 requires that if you're subject to seiche or tsunami,

structures would need to be placed at elevations above those likely to be adversely affected by the tsunami or seiche event or be designed to allow swift waters to flow around, through, or underneath without causing collapse.

Regarding noise, the temporary or periodic impact of construction activities occurring within 100 foot of an occupied residence would generate noise levels similar to (inaudible).

The noise level generated by pile-driving operations at the site would also result in a significant impact. Therefore, we -- the County has included Mitigation Measure Noise 1 to require the construction contractor to implement measures to reduce noise levels such as reduce drilled piles of sonic or vibratory pile drivers instead of impact pile drivers, as well as the use of temporary barriers such as a sound control curtain between the project and the Pillar Ridge Mobile Home Park, which is in the area right adjacent to it. As well as other noise reduction measures.

Regarding transportation and traffic, the results of the level of service, or LOSC, (inaudible) under average project conditions show that all of the studied intersections would operate

at an acceptable level of LOSC or better. However, the eastbound left turn movement at the intersection of State Route 1 and Cypress Avenue, shown north of the project site, is shown to meet Signal 1 of the project conditions, as well as cumulative conditions, which assumes construction of all approved projects within that area, both with and without the project.

Mitigation Measure Transportation 1 requires the applicant, following project occupancy, to submit a biannual report to the director on the level of service at the intersection of Cypress Avenue and State Route 1 stating whether or not a signal is warranted.

If so, if the signal becomes warranted, applicant is required to pay its fair share for the escalation of the signal within five years of the date of the report stating that the signal is heavily warranted.

Regarding utilities and service system, this will be my last summary, with the -- while the applicant proposed to treat recycled wastewater on site, a sewer connection to Granada Sanitary District is proposed to handle surplus flows during the wet season and other emergency services.

Mitigation Measure Utility 2 recommends mitigation of sewer capacity limitations by either requiring the applicant to limit the flows generated from the project to that which can be handled by the existing Granada Sanitary District or to provide for necessary expansion of the sewer system.

Following the close of the public review period on December 24, 2009, CAJA, in complication of the planning staff, will review and prepare responses to all comments received at this hearing as well as on and before December 24th. Both comments and response to comments will be included in the final EIR document and distributed and be available in February 2010.

Consideration of the project and the Draft EIR is tentatively scheduled for the planning commission hearing on February 24, 2010. This includes staff recommendation that will be available for any questions or comments.

UNIDENTIFIED COMMISSIONER: Thank you very much for the very clear presentation.

Any questions for staff?

UNIDENTIFIED COMMISSIONER: If I may. With respect to that tsunami, we have a zone with

Miramar, which is actively a tsunami run-up zone; and all new construction in that area actually does conform to what you talked about. The buildings are on stilts to deal with run-up zone. Is the same condition applying to this particular project?

MS. LEUNG: Right.

UNIDENTIFIED COMMISSIONER: So my question is, do the pictures that we have in front of us reflect that kind of a building scenario? I mean, we have pictures of trees hiding the buildings because they're a certain height and yet we're talking about maybe having to put them up.

MS. LEUNG: Right. I do know that it will not exceed the proposed height of 45 feet, 6 inches for the office buildings. Whether the base elevation reflects the appropriate elevation above the tsunami/seiche level, I'm not actually sure about; but I can refer it to Jeff Riley from CAJA, who prepared the hazard section.

Did you want him to come up and answer that?

UNIDENTIFIED COMMISSIONER: Well, that question needs to be answered at some point. Now or either in the revised --

MS. LEUNG: It is a mitigation measure. So

it would be taken into consideration when the project is probably redesigned to avoid the cultural site and then brought back to the planning commission.

But I know that the height of 45 feet, 6 inches, if that is your concern, if it will affect the building height because of raising all the heights of the buildings.

UNIDENTIFIED COMMISSIONER: What we've done in Miramar is we said, okay, Building A has to be 10 feet high to avoid the run-up zone. And, typically, what has happened is the policy has been to say we don't count that 10 feet. In other words, the building is 35 feet high above the 10 feet.

MS. LEUNG: Uh-huh.

UNIDENTIFIED COMMISSIONER: So you end up with -- in a 35 foot height zone, you end up with a 40 foot, 45 foot high building.

My question is, is that's what's going to happen here?

MS. GROTE: If we could interject. We will look into this further. In the Miramar District, actually that first 17 feet is restricted in use; it can be parking or storage. It still is

calculated into the overall height of the building. The height limit there is 36 feet.

UNIDENTIFIED COMMISSIONER: I just made up the number.

MS. GROTE: So, you know, you don't have buildings exceeding the height limit. What you do have are limitations on the ground floor to parking and storage.

UNIDENTIFIED COMMISSIONER: Okay.

MS. GROTE: And you have also breakaway walls. So if there is an event, the walls will collapse, basically. There's still the foundation there, but the walls break away and the water can flow through freely. So the building doesn't collapse, but the walls break away.

So we'll explore your question further and have a more detailed answer for this site.

UNIDENTIFIED COMMISSIONER: For the next hearing?

MS. GROTE: Correct.

COMMISSIONER SLOCUM: Could you state for me, just clarify for me, the impacts that a DEIR needs to study on climate change. Could you summarize those and then maybe point to where they are in the document.

MS. LEUNG: Right.

COMMISSIONER SLOCUM: Because they're not called out in the same way as many EIRs that I've seen recently.

MS. LEUNG: Okay.

They're in the -- the greenhouse gas analysis is in the air quality section. And I can tell you what page.

It's page 4.C-6. It states the overall regulation for greenhouse gases.

UNIDENTIFIED SPEAKER: What was the conclusion? Just to summarize. Because you didn't include it as something where there was any conclusion of significance or nonsignificance and the basis for that.

MS. LEUNG: I don't believe -- I'm actually -- oh, there it is.

It's on page C-28 of that section, Impact AQ6, Greenhouse Gas Emissions. That's the analysis portion.

And C-6 is where it summarizes the level of impact as less than significant.

UNIDENTIFIED COMMISSIONER: And the standard of significance is stated where?

MS. LEUNG: The thresholds of significance

are on --

COMMISSIONER SLOCUM: I apologize because I had trouble finding it last night myself.

MS. LEUNG: Okay. It's definitely in there. The thresholds of significance are on page C-13. And I believe it's C. Section C on that page.

COMMISSIONER SLOCUM: Thank you.

And with regard to the description of the project as far as the timing and phasing of the project, could you just maybe outline that a bit and talk about whether there's going to be a development agreement.

MS. LEUNG: Okay. That a development agreement has not been proposed at this time. However, they do have what's called a best and tentative map. Which John Nibbelin of County Counsel could probably explain that a little. They're similar in nature. It sort of raises the regulations at the time the application was deemed complete. I believe he can sort of describe that more thoroughly.

As far as, um -- you had another question.

UNIDENTIFIED COMMISSIONER: The phasing.

UNIDENTIFIED COMMISSIONER: The phasing of

the project. A general statement as to it.

MS. LEUNG: Okay. My understanding is that the office park will be built based on demand. I understand probably commitment from businesses to move in to a particular building when a building gets built. So you'll only have the amount of buildings where there's sort of a demand for those buildings and that office space. So that could affect the overall buildout, depending on demand. But at maximum it would be the four buildings as proposed. The applicant could sort of describe that further, their plans there for (inaudible) understanding.

And then the wellness center will be built regardless.

Not based on demand. There's already demand. In terms of housing for the development.

Perhaps the applicant can address sort of the timing as between those, as how it will be determined whether and what actually gets built as far as office space.

COMMISSIONER SLOCUM: And could you just clarify, what is the elevation of this site?

MS. LEUNG: I believe it's --

COMMISSIONER SLOCUM: I'm sorry. Do you

need to look this up?

No worries, you can come back with it. I couldn't find it myself last night.

MS. LEUNG: Okay. The topos are Figures 9.0 to 27.7 NGVD, which is national geodetic vertical datum. And that's for -- both sites. Within that range, 9 to 27.7.

COMMISSIONER SLOCUM: You --

MS. LEUNG: And there is a topo map of the existing site, a Figure 32-B within the project description chapter. There's two separate topos for each of the sites, one for each.

COMMISSIONER SLOCUM: Thank you.

CHAIRMAN RANKEN: Any questions for staff?

Thank you very much.

The next step is we're going to give the applicant a chance to speak if the applicant would like to.

You could start out by stating your name into the microphone.

MR. PECK: My name is Jeff Peck.

Anyway, I want to thank the commission for having us here to discuss our project. My name is Jeff Peck, I've been a resident --

UNIDENTIFIED COMMISSIONER: Excuse me. If

you stand naturally, we can hear you fine.

MR. Peck: Thank you.

I've been a resident of El Granada for 20 years. My children grew up in El Granada.

I am a partner in the Big Wave project. I'm also on the board of directors of the Big Wave group, which is a nonprofit corporation that would own and that would operate the wellness center.

The wellness center is a community that we designed to provide for the developmentally disabled adults and help the children to provide them with a meaningful and full life.

This is something personal. There are two things in my life which prepared me rather than helped me to develop this project. One is I've been a union contractor for large commercial and public work projects for 30 years. I know how to build things.

The other one, which is the driver of this, is I have been blessed with my daughter Elizabeth, who has developmental disabilities. And that's her right there.

Elizabeth and the many special needs children and adults that I've had the opportunity and the luck to work with for the last 20 years of

my life have shown me special insights into life. They have shown me ideals that we all should live by.

But everything isn't wonderful. There is always -- there has always been a gnawing question in my mind, as well as in all the minds of parents who have or are in the same condition as I. And that question is this: What will happen to my child if I get ill or when I die? Who will take care of my child after I die? Who can do what I do for my child?

The answer to this, unless there's a family or a relatives that the special needs adult can go to, or if the special needs adult is fortunate enough to live in an environment that provides independence, the answer is that the authorities will come, they will place you in a group home, perhaps an institution, miles away from your home.

You know, this shouldn't happen in our society. This does not have to happen. Not only are the special needs adults perfectly capable of taking care of themselves if provided with an environment that provides independence and a community in which to live; but our society has plenty of resources, especially the private sector,

to provide that environment.

The key -- the key to doing that is when a group of individuals, businesses, and community comes together to provide that environment.

On the coastside we've found that key, and we've opened the door.

After 8 years of excruciating pain and joy in developing this project and spending thousands of hours in committees of design and to redesign things, and to traveling places around the Bay Area to see what a good -- what a community should look like, as far as Kentucky, as far as Montana, we've come up with something. And the wellness center is testimonial to that.

You know, we as a society have got to make this happen. So what the coastside community has done is it's -- we've gone through this eight long years and stand in front of you today and we're asking for you to approve the wellness center; we're asking you to approve the financial engine of this wellness center, the office park, which will provide the financial ability to actually build this.

Now, the next speakers will talk about several things. Nicole De Martini will talk about

more specifics of the wellness center. She will also talk about how there's an inextricable connection, financial connection with the office park that actually financially sustains the wellness center.

Scott Holmes will talk about more technical issues, the draft environmental impact report. He will talk about how Big Wave conforms to the coastside LCP and to the California Coastal Act.

Dave Byers will close with legal and zoning issues.

Thank you very much.

MS. DeMARTINI: Good morning, Commissioners. Thank you for having us here today. We're very excited and very proud to be presenting this project to you. I came to Big Wave a while back with experience in project management, and I was brought in to help organize and continue the process of developing the Big Wave model. We call it the tripod model, we call it the three-legged stool, we have a graphic that has three interlocking gears. Phrase it how you want, this model has three pieces that really depend on each other to thrive.

This model was developed, really, by the

local community. The wellness center, the heart and soul of this project, as Jeff described, was developed by parents of developmentally disabled children and adults, by professionals in the community, and by the developmentally disabled themselves.

The office park was developed with consultation from local businesses, by -- from consultation with businesses who had started on the coastside and then grown too big to continue to be on the coastside because no space is currently available for organizations to grow their technologies that they have so they can really thrive.

And the environmental aspects of the project, which Scott will describe more, we consulted with wetlands experts, biologists, people who are experienced and seasoned in the field. This one was verified by the EIR, which is why I'm the person talking about it today, not to mention that you really can't understand the EIR or the project without understanding our model.

So I'll start with the wellness center. The purpose of the wellness center, a developmental wellness center, was to provide a meaningful life

for individuals with developmental disabilities. I don't presume to know you, but I can assume that the fact that you are sitting where you are, in a place of public service, that you want to do something meaningful and you want to help the community.

Developmentally disabled adults have the same ability, but aren't -- but are nearly never given the opportunity to do that. But with enough support and with enough security, they really have the ability to give back.

So I am going to run through how we're going to do that. The first piece is essential, and that's housing. Affordable housing. Which, as you know, is part of the goals of the Coastal Act and the goals of the LCP. Now, I want to be clear. When we're talking about affordable, we're not talking about your typical affordable housing situation. These individuals are lucky to get $700 a month from Social Security. Even the local neighborhood affordable housing area at Villa Ridge is much more expensive than that each month. So we are talking about really affordable for a population that makes about 15 percent of the per capita income.

The wellness center will be made affordable first by the donation of the land, because you really can't build affordable housing if you have to buy an expensive piece of property. So donation has been critical.

And it will also be sustained financially by the adjacent office park, which I'll discuss more later.

The housing will be a co-op community center. So residents will each own a share in the wellness center. Home ownership is nearly unheard of for this population, obviously because of the limited financial abilities. And the co-op will allow the residents to share in the expenditures.

So there will be a number of businesses that will sustain the wellness center. And the residents, being shareholders of the nonprofit, will be able to dictate how those profits come back to make their housing affordable and provide programs and services.

Most importantly, this is a space that they can call their own. A 500 to 1000 square foot apartment with efficient kitchen, private bath, living and dining area, combined with a community space so that they can have privacy if they want or

they can be out and interacting with their friends in the community.

Affordable housing for the caretakers who, unfortunately, also make a -- live below the poverty line, is essential. The low income of caretakers has often meant the caretakers can't afford to stay in the field. Which means that caretakers are constantly turning over, which does not provide stability for a population that needs stability most.

Meaningful employment is also essential. Big Wave operations are designed to employ the developmentally disabled. And this is key because it's -- the unemployment rate in this population is atrocious. And so providing employment is essential. So we're estimating at this point 80 to 100 jobs to be generated for the developmentally disabled, and the close proximity to the office park will open the door for many more jobs. We'll only have about 50 residents living in our community, so that means many more DD people will be able to find employment than just our residents.

The sense of community is also essential. You know, I was talking with a mother of a DD adult recently, and she talked about her struggle to get

her child out in the community interacting with her friends. Just with the day-to-day hustle and bustle, she's lucky if she can get her child out twice a week to interact with her friends. In this community they will be surrounded by the people who love and care for them every day. And that's really essential for a population that typically can be very isolated.

Public transportation. Two SamTrans lines run by the property; but in addition to that, Big Wave will be supplementing the transportation with a motor pool so that residents will have the opportunity to go where they want and need to be when they want and need to be there.

Additionally, we have the recreation space, including a competitive -- a Special Olympics competitive-sized pool, which will allow the community to also come to us to utilize our facilities.

And the last piece is giving back. Providing -- you know, with all of these pieces put together, the DD have the opportunity not just to live but to really thrive and interact with the community and give back. And that is something that is just unheard of in this population.

The second piece, the office park. You know, the coastal action -- Local Coastal Plan looks to rebalance the ratio of jobs to residents. And decision makers have stated over and over again in these policies that people can and should work where they live. And the community has reiterated this over and over again, about how there is a need for this space on the coastside so that businesses can grow and thrive.

And our economic studies show that the coastside has one of the highest educated populations in San Mateo County, but very few professional opportunities exist locally. So this will provide the opportunity for so many of our residents on the coastside to work where they live, improving traffic, improving the quality of life overall.

It's also a key piece because it provides long-term financial stability for the wellness center. The businesses will pay an association fee to the wellness center that will provide consistent, predictable funding. There will also be a number of businesses that serve the office park, from the wetlands restoration, the food catering and services, the clean energy generation,

water and wastewater production. All of these are wellness center businesses that will serve the office park but will provide meaningful work for the developmentally disabled and provide a revenue to make their housing further affordable.

The last piece, I'm not going to go into. Scott Holmes, our engineer, will discuss the environmental restoration piece more. But we are voluntarily restoring eight acres of the property to wetlands. And this is one of the largest wetlands restoration projects on the mid coast.

Water recycling and storm water infiltration systems will recharge and already help the aquifer with putting more water back into the ground than we take out of it. And all buildings will be LEED-certified platinum. And it's really revolutionary, the model and what we're doing for the environment.

I am going to close with just a quote. I'm not sure everyone here is familiar with the Beachwood project in Half Moon Bay. Sara Christy, the legislative director for the California Coastal Commission, described what she felt were the ideal options for Beachwood. "Such options include a design that limits development to the six-plus

acres of nonwetlands, incorporating state-of-the-art water quality measures, providing some much needed workforce housing. It qualifies for state grants to restore the wetlands and protect critical habitat. The remaining open space could provide public walking trails, groundwater recharge and wetland restoration, and serve as a model for how to integrate environmental protection into urban design plans."

Big Wave does all of this and more.

So, that said, I'll pass it on to Scott Holmes, Big Wave's engineer.

Thank you.

CHAIRMAN RANKEN: Thank you.

MR. HOLMES: Good morning. I'm Scott Holmes, and I'm the project engineer for Big Wave. I have been involved in the special needs community on the coastside for about 20 years so I know most of the people, and my daughter has grown up in that environment. And prior -- I'm the retired public works director and city engineer and waste water manager to the City of Pacifica. I'm bringing it up because Pacifica was a great place to work and also a great place to have an opportunity for restoration. And I managed to work with five or

six large restoration projects.

Let me advance the slide here.

This is not real clear, but that's the Clear Creek project. And that was a roughly 30-acre restoration. And most people think it's been there forever, it's about 15 to 20 years old. And it initially -- the reason I'm mentioning this is that we're incorporating many of these aspects into our project plan.

We started out with two red-legged frogs; there's now about close to 10,000. 20 bird species, 120 now. And we're using the same restoration techniques in our project that we're proposing.

I also managed -- I also was involved in the design of about three miles of coastal trail, designed and constructed a 300 kilowatt solar system. And our project is net positive voltaic solar and wind power. And I actually address the greenhouse gases a little bit later in the talk, plus the tsunami issue if I can come back to that.

And my commitment is really because of my daughter. I cropped myself out of this project because I had a pumpkin on my nose. Thea is here, and she's a marvelous person and has many

characteristics that I wish I had myself. She is lacking the ability to compete in a fairly aggressive economic society, so Big Wave was really designed to provide her with a place to live where she can not only support herself but she can also give back to her friends and help other people in her community.

And again, I don't -- this has been covered by Nicole, but Big Wave was really a culmination of plans to provide housing. As our kids grew up, this is the ultimate question, where are they going to live when we can't support them anymore? How are they going to function and contribute?

There's a whole list of these issues, which I'll talk about. Rather than go through the slide, I'll just kind of start. We mentioned social needs. About 80 percent of professionals commute. That's about 2,000 commuters a day. And Big Wave provides up to 600 local jobs in that spectrum. It's a large project, the office park is, because there is a large disparity between professionals and professional places to occupy.

Again, the project addresses a large traffic issue; and CEQA requires that we address the largest potential project. There are all kinds

of wiggle room below that, but nothing above it. The project is going to be phased to meet demand, we are not going to build a large complex and wait for it to be filled. So we have to work that out with a development plan from the County. Also, the larger the scale, the greater financial contribution to the wellness center.

And the EIR, again, analyzes the worst visual impacts. The building height currently is 45 feet including the wind generators, 36 at the wellness center. There is no ridge line impacts, no coastal view impacts, no scenic corridor impacts.

I did want to say the picture is from the Mavericks parking lot on the top, but it needs to have a wetlands restoration included. That wasn't shown. But if you -- if anybody has driven north on Highway 1 and dropped into Pacifica, the San Pedro Creek wetlands restoration really was -- it had a functional goal, which was to replace the flood control project, that was a pipe, with a thriving system that also blocked the view of a rather tall shopping center. The backs of shopping centers aren't particularly attractive. And the alders that we planted there are now 35 feet tall.

So we anticipate a similar type of restoration and almost no views from the back of this site or from the front.

There are a number of projects that are similar. I just drove around for a couple of hours and took pictures. This is a commercial site similar to the size of the wellness center, similar to the height. Again, residential in Princeton, similar heights. And a number of churches in that size. Shoreline Station about the same size. The buildings even next to the project site are close to 36 feet tall, the front one.

We're going to cluster -- we're actually redesigning the wellness center to avoid any potential impact to the archeological, but also to put all the higher buildings up against the existing buildings on the side.

Again, residential complex similar size, similar height. And even our fire station, similar size, similar height.

A lot of square footage projects similar to the office park. This is about the same square footage, and it's over 40 feet. Over 50 feet for the Ritz Carlton.

The senior center and the school behind it,

similar size, square footage. The Stone Pine Center, similar size, little shorter, similar square footage along with the residential.

And I'll verify this, but I think this is taller and larger than our proposed option. This is also in Princeton. It's the Oceano Hotel complex and shopping center. Let's see here.

I think I'm not advancing anymore. Does that mean we're -- we're advancing on the computer but not on this.

I'll back it up.

Okay. It's kind of hard for people to visualize how a project -- a large project actually reduces traffic. Traffic is really traffic congestion. It's not number of cars, it's where they all get jammed up. And a reduction of Highway 1 and 92 can be between 4 to 6 percent, as shown in the traffic report. And that essentially means 70 jobs are going the opposite direction. Which means people, instead of leaving the coast, are actually working on the coast.

And local intersections aren't heavily impacted. The only one that had some significant potential impacts was Cypress Avenue on the left turn. And the reason for that is the area

primarily now is residential. We generate about 2749 residential trips. And residential trips leave in the morning and they crowd that Cypress left-hand turn. Big Wave, at its ultimate development, will be about 2100 trips; and it crowds that left-hand turn in the evening. So it's an opposite commute. They're not particularly additive.

That's why the current residential's close to tripping a need for the light. Ultimately Big Wave -- that's for the morning trips. Big Wave will ultimately, potentially trip it for the evening if we don't come up with traffic interventions that divert traffic from that intersection. Which we do plan to do.

And some of those include the structural design, the road improvements, which hasn't been approved for a while. And others can be everything from shuttle buses to charging parking to make sure that those -- that they can get free parking if they take a route that's not crowded, things like that. But there are a lot of innovative options.

And the air pollution reduction is another thing that's hard to identify. The -- or hard to relate to. Fewer commutes result in significant

reduction in CO2, 112 tons a year. 15 tons of cancer-causing pollutants, 410 tons of knocks (phonetic).

The wetlands restoration, we have 500 wetland trees, which reduce greenhouse gases by 50 tons a year. We have -- again, we're net positive solar and wind. And that's equivalent to 20 tons reduction, 60 tons -- 20 tons CO2 and 60 tons total per year.

And LEED-certified construction reduces our air pollutant production by 60 tons, or 3 tons a year, which exceeds the construction-related pollution. So we're a net reducer in greenhouse gases. And that was the big goal of the project.

We protect cultural resources. We avoid everything that's even potential. There are no sites, no camps, no villages, no shell mounds on the site.

And, agriculturally, it has a long history. This is a 1906 map. We have even an 1800 map and a number of photographs, but the property was originally owned and farmed by the Valencia family. And by 1906 they'd actually filled in the Pillar Point -- the Pillar Park Marsh. It was heavily used for cattle. There's a couple of pictures

historically that are out and about. And then vegetable crops.

We farmed it for the last five years. And in our farming we -- one of the things that's been criticized, we've added about 300 yards of topsoil. I actually have a picture I could circulate. It's discrete piles of horse manure, topsoil, and chips. And those are within what's legal for farming.

It should be noted also those areas are areas that are going to be part of our wetlands restoration. And whatever farming we've done in the last five years, we haven't altered the topography. We have a survey picture that shows it essentially before the project, one foot contours, and almost identical after the -- after we've been farming it for these number of years.

And this whole area has kind of shifted to commercial; but again, there's a lot of opportunities for restoration and improvement of the marsh.

Again, we're trying to enhance -- we're planning on enhancing the agricultural resources. We're currently farming 16 acres. It's not sustainable, not organic. We're looking at ultimately doing 3 acres of sustainable organic on

site, 8 acres of restored wetlands, 2 acres of organic community gardens adjacent, 4 to 10 acres of additional farmland that currently isn't farmed due to soil and water issues.

And food services are based on the slow food movement. We're trying to grow organic food close and limit transportation.

Again, I could talk about this for a month; but it's a pretty exciting design for wetland restoration, focused on red-legged frog. There have only been two that have been found, that have been recently located about 10 years ago. There is no breeding habitat. That's something we plan to introduce.

We basically provide a diversity of plants, which are going to provide a diversity of invertebrates and vertebrate species. It's shown in everything else we've done so far, I've been involved in.

Hydrology is critical. Dennison Creek was diverted from the project site. That was the creek that formed the marsh. So the current marsh is currently dependent on groundwater. And there is some runoff from the remains of the creek that go through a culvert system in the airport pickup

Highway 1 drainage. Water quality is not great but at least there is some.

Groundwater -- this is the table from the Kleinfelder Midco study. It is a very healthy aquifer.

The CCWD in Montara, they pull about close to 400 acre feet. But even with a drought year there's still a large excess flow into the ocean. Normal average is 507 acre feet even after it's been taken.

Our project, we have a domestic well. We're going to -- we're going to withdraw about 11 acre feet; but through permeable surfaces, permeable parking lots, groundwater recycling, we're actually replacing 16 acre feet. So we have a net 5 acre feet increase in the water supply.

Airport. We've been -- there's been some concerns about comparisons to us and San Carlos. Very different wind conditions, very different surrounding conditions. Almost no application between the two. We adhered to all the airport setback -- excuse me. Setbacks. We're working with the airport to make sure we don't interfere with their operations.

And then the issue that came up earlier --

and there is a real kind of a misunderstanding between a tsunami evacuation zone and a tsunami inundation zone. And FEMA and OES has decided to take a uniform elevation for the evacuation zone of San Diego to Alaska, 42 feet. And that is to make it easy for sheriff's department's, OES to actually know where the evacuation occurs.

Inundation varies dramatically different based on the local conditions. We had a 3-foot seiche wave in 1946. That's the largest one that's ever occurred. That's on top of the mean high tide. We're designed to be 10 feet above that.

And in one of the pictures or projects in Pacifica was the Pacifica State Beach was really seal a pipe and it was designed for inundation and seiche waves essentially. We're 10 feet above the highest level of that. 10 feet above the highest flood level, which is 100-year flood. We're 10 feet above the highest projected global warming level, and we have 3 feet clearance if all of those things occur simultaneously. So that was looked at fairly closely.

But, again, the highest tsunami that has been recorded was elevation 10. We're at elevation 20. And that's within 200 years so it's -- And

it's probably -- there's no geological record of anything prior. So we're not really in a tsunami inundation zone, and that's -- but it is clear the 41 feet, when it's seiching -- I'll identify that for evaluation -- clearly says it's not for zoning, planning, or construction.

And let's see. I don't want to -- and Dave Byers. We're lucky. I'm done.

Thank you very much.

CHAIRMAN RANKEN: Thank you.

MR. BYERS: Good morning, members of the planning commission. I'm Dave Byers, I represent Big Wave.

I don't think I could match the eloquence of my clients, and there are many voices that need to be heard today by the planning commission so I'm going to be very brief. But I have five very important things to say about the legal issues regarding Big Wave.

Call first slide.

First of all, this site is zoned for development. This is a very important factor. If you look at the map to the right on that slide, as we saw before when Camille was giving her presentation, our project is in development zoned

property M-1 and waterfront. If you look at the surrounding area, you'll see PAD and you'll see RM-CZ. Now, I'll tell you I've been a land use attorney in this county since 1982. Many people come into my office owning land in the PAD/RM-CZ area and want us to represent them, and they have fairly intense development projects. And I say it doesn't comply with the zoning, don't waste your money.

Eight years ago, when Jeff Peck came into my office and talked about Big Wave, I said, well, you know, this project is in a site that's zoned for development. It's M-1 zoning. I'm not even sure there's other M-1 zoning in that immediate area on the coastside. So this is not land that is designed by the County to be retained in open space or PAD or RM-CZ. It's zoned for, quite frankly, intense development. M-1 zoning is the most intense development on the coastside.

Next slide.

No. 2. I want to talk a little bit about the wellness center. Once again, before we came in to the County with our application, I looked at the issue as to whether or not the wellness center is a permitted use on the waterfront zone. And I talked

with the County about this. Now, I actually came in to the County with a full application for this project on October 18, 2005. A long time ago. Prior to that I talked with Lisa Grote, I talked with Marcia Rains, I talked with Mike Murphy, I talked with George Birdman -- I'm not sure he works for the County any longer -- about the use permit process for the wellness center.

Now, you use a use permit process for uses such as this. For example, there's no hospital zoning in the county. We don't zone for a hospital, but we have hospitals. The way we do that is we use the use permit process. That's the same thing for the wellness center.

My third point: Like I said, we came into the County October 18th, 2005, for the application. Now, we've done an EIR. This book cost $400,000. Okay? I hope everybody really enjoys reading it.

This project has been studied, analyzed, reviewed, redesigned based on input we received from CAJA, and restudied. There has been significant study on this project.

I want to talk a little bit about affordable housing, my fourth point. In April of 1982 the County approved the Local Coastal Program.

At that time, there were three affordable housing sites designated for affordable housing. Now, how many units do you think have been built since 1982 on those three affordable sites? Zero. Not one single stick of affordable housing has been built in unincorporated San Mateo County's coastside on those three affordable sites.

This is an affordable housing project. As such, it should be approved. It's entitled to priority. It's entitled to sewer and water priority.

Finally, next one. These are just sections from the California Coastal Act Public Resources Code. Section 302.50, paragraph A. "New residential, commercial or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to existing developed areas." That's Princeton. As you saw on that map before and as you've seen on the overheads, this is a site that is bordered by development. The Pillar Point Mobile Home Park, the industrial area of Princeton.

Next slide.

Another section from the Public Resources Code. "You should provide commercial facilities

within or adjoining residential development." That's what we're proposing to do.

In short, we have a project here which is on a site designed for development, which is consistent with the Local Coastal Program and the Public Resources Code and finally -- finally make some effort to build affordable housing on the coastside.

Big Wave is a project that should be approved, Big Wave is a project that needs to be approved, and it's the right thing to do.

Thank you very much.

CHAIRMAN RANKEN: Thank you.

I'm going to open the public hearing in a moment. And I'll have some more to say about that in a moment; but to start out with I want to quickly ask -- well, I will open the public hearing now and give you all a chance to talk.

I want to quickly ask if Kathryn Slater-Carlin is here. Yeah. If you're still here, if you could -- I'll give you a chance first. I know you had come to me earlier and said you had somewhere you need to be. So you can go ahead and take your three minutes, if you could now; and then we'll go on with the remainder.

MS. SLATER-CARLIN: Thank you very much. It's a pleasure being here.

I want to speak first to the process and somewhat to the DEIR. It's a huge document, and we'll all have an awful lot to say about it. First, in the instance -- in the interest of a green and environmental county, this and all future -- this one it's too late for, but all future public hearings should be on the coast. Look at the number of people in the audience, there may be some outside. Count that into the number of cars, the amount of gas, fuel, and time from work that has been taken to be here on a Wednesday morning. I think an evening meeting on the coast would be more beneficial to the economy of the county as well as to the green issues. 1

I am a member of the Montara Water & Sanitary District Board, but I am here speaking entirely as an individual. The district will have comments later. 2

In any event, this -- the mitigations are flawed. One of the mitigations that is recommended is thinking about getting a traffic light and then doing studies every two years. Frankly, there's going to be a lot of construction traffic with 3

this. You saw the problems on Cypress. The traffic light should go in prior to any construction.

In my look through the DEIR, I did not see where construction workers will park. Will they be jamming up along Airport Boulevard?

Where will the construction activities be staged? Will they be at the airport? Will they be on the wetlands? Where is this going to happen? Where will the farm -- the on-site farm be? Or will it, you know, be on the airport? Has an agreement been cut with the airport for this?

Moss Beach has three affordable housing sites already, as was stated. One is the Pillar Ridge. Maybe one of the things that should be considered, if this is going to be considered an affordable site, is to transfer the affordability from one of the other two sites in Carlmont Vista, which has no water, to this site.

The views that we're shown do not show the views from Highway 1 moving from the north to the south. That's a critical flaw.

The DEIR does not answer specific questions on the septic system. Ignoring what JOC put in its comment letter, the question that comes immediately

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to mind is, why does the DEIR use a 1980 set of EPA standards, not the current county septic system standards?

The current standards call for the groundwater level to be 8 to 11 feet below the bottom of the trench, which should be 8 feet deep. I don't think the septic system meets those.

Water is yet an undetermined source. The ag well needs to be converted to commercial or residential use. And, in fact, the County established an upper limit to the groundwater withdrawals from that basin. The Board of Supervisors passed that in about 1989. Any assessment of the withdrawals needs to take into account the need for both water districts at full buildout on the coast. This project should not remove water from the existing lands.

Thank you.

CHAIRMAN RANKEN: Thank you very much, Kathryn.

Okay. Now, again, the public hearing is open. All of you will get a chance to speak. We have a lot of interest here, as we can see; and we're all happy to see that.

I want to start the public hearing, though,

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with a few people who, on a prior arrangement, have agreed to speak on behalf of a small group; and they'll be given a little extra time. I'll be hearing from Sabrina Brennan, Lisa Ketcham, and Lennie Roberts.

After that I'll start into our big stack. I'll do a few of these pages here; and then we'll take a short recess, and come back and hear from all of you.

So Sabrina Brennan.

Sabrina Brennan can start. And Sabrina is speaking on behalf of Seal Cove property owners group and represents two other people in addition to herself.

MS. BRENNAN: Thank you for the opportunity to speak here today. And I am representing property owners in Seal Cove. I have a slide presentation. I think that will be up in a second. 11

As soon as that's up I can start.

ROSARIO: This is the one, right?

MS. BRENNAN: Yes.

ROSARIO: Okay.

Just a moment.

MS. BRENNAN: Okay.

ROSARIO: Thank you.

UNIDENTIFIED COMMISSIONER: Isn't technology wonderful.

(Whispered discussion regarding slide presentation.)

MS. BRENNAN: Okay. Can we start the timer over?

I'm going to try to speak quickly. So, again, thank you for the opportunity to speak today. I am going to start with reading something directly from the Big Wave project Draft EIR. "The proximity of the project to the partially enclosed Pillar Point Harbor and the potential for tsunami events could expose people to an invasion by seiche, which represents a potentially significant impact."

Is the Big Wave project prepared for a big wave? 12

This image is from the 2007 grand jury report, and in black it's clearly -- it clearly designates the tsunami inundation zone.

A seiche is a standing wave in an enclosed or partially enclosed body of water. The tsunami that hit Hawaii in 1946 had a 15-minute interval between wave fronts. The natural resonant period of Hilo Bay is about 30 minutes. That meant that

every second wave was in phase with the motion of Hilo Bay, creating a seiche in the bay. As a result, Hilo suffered worse damage than any other place in Hawaii, with the tsunami/seiche reaching a height of 26 feet along the Hilo bayfront killing 96 people in the city alone.

Seiche waves may continue for several days after a tsunami.

The earthquake that triggered the seiche in Hawaii is also the same earthquake that triggered the tsunami that hit Princeton. This image is of the debris on the day of the tsunami in Princeton.

This is another image from the same day the tsunami hit Princeton.

This photo shows Romeo Pier, which is still standing today. And you can see the water level is up at the top of the pier. You can also see a car parked on the top of the pier.

This picture is from the day after the tsunami, and you can see how the water is receded and the pier is exposed, looking a lot like it does today.

This photo shows the water level. It was documented to come up to the windowsills of this house. And again, this is in Princeton.

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This is the day after the tsunami. You can see the same house, and you can see the water has receded.

Structures should either be placed at elevations above those likely to be adversely affected during a tsunami or seiche event or be designed to allow swift water to flow through or underneath without causing collapse.

ABAG tsunami maps show that the project would place residential and commercial structures within the map's tsunami zone. This would represent a significant risk to human life.

Would you want to be trapped with swirling water and debris all around you? Would you want to be desperately trying to escape a natural disaster with traffic from the office park choking your exit?

How do special needs people get the necessary evacuation help needed?

This would represent significant risk to human life.

The San Andreas Fault just off the San Mateo County coast has the potential of causing a tsunami with essentially no warning time. The San Mateo County Office of Emergency Services

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advises that members of the public who are in low-lying areas immediately head for higher ground within -- when an earthquake occurs.

Princeton, Pillar Ridge, and Seal Cove only have one tsunami evacuation exit. That's Cypress Avenue and Highway 1, also known as Cabrillo Highway.

This map shows the tsunami evacuation area. You can clearly see that the project is located within the evacuation area. 15

This shows the evacuation exit, Cypress Avenue and Highway 1.

This is a photo of typical traffic at that intersection.

This map shows Princeton, and it shows -- the arrows indicate two bottlenecks that back up in Princeton. This is a picture of both of those intersections, Prospect at Broadway and Capistrano Road.

Why did the County decide this project only required a 500-foot notification area?

This image shows the 500-foot radius of the notification area, and you can see that includes the bluff top and the airport property. 16

Why are the developers refusing to put up 17

story poles during the CEQA public comment period?

The Fitzgerald Marine Reserve, Pillar Point wetlands is shown in this photo. You can also see where the office park would be located. Pillar Point wetlands and the Fitzgerald Marine Reserve are in an area of biologic significance and part of the federally protected Monterey Bay National Marine Sanctuary.

This map shows the critical coastal area boundary.

This map shows the watersheds within the critical coastal area boundary.

This close-up of the watershed shows how the Pillar Point Marsh watershed flows directly between the two parcels that comprise the Big Wave project and into the Pillar Point Marsh.

This aerial view of the project site clearly shows the seasonal creek, which is part of the watershed and where the water flows through into the wetlands.

I'm going to skip this slide for lack of time.

And thank you very much. I appreciate it.

CHAIRMAN RANKEN: Thank you very much, Sabrina. We appreciate it.

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Okay. Next we're going to go to Lisa Ketcham and Kevin Cooke. And you guys will have -- again, you're representing the Pillar Ridge Homeowners Association, so you'll be exempt from the normal three-minute time limit.

MS. KETCHAM: Actually, there's two of us and we'll each be under three minutes, if that works.

CHAIRMAN RANKEN: That's fine too.

MS. KETCHAM: We have a slide (inaudible).

I'm Lisa Ketcham, president of the Pillar Ridge Homeowners Association in Moss Beach. For several years we've been hearing the compelling testimony of the potential residents of Big Wave Wellness Center and their coastside support community. We've been hearing about their dream and the urgency of the Big Wave project. Anyone with a heart would have to sympathize with these young people.

In the Draft EIR, the alternative sites for the housing component of the project are rejected by the developer because other undeveloped coastside affordable housing sites have obstacles and because they consider the housing be located within the Princeton industrial district near the

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office park.

But there is another alternative right next door. The manufactured home community of Pillar Ridge is a designated affordable housing site under the County's Local Coastal Plan. We have nonprofit ownership and space rent control. We have a sense of community having accomplished these things ourselves. There are safe interior streets in a multicultural neighborhood of families, children, and retired people. There are developmentally disabled adults and children already living here. We would welcome more. They would be members of our diverse community rather than living in isolation.

There is a community center, swimming pool, fitness room, playground, and basketball court.

With 227 two-, three- or four-bedroom homes, there are usually a few for sale at any particular time. There are opportunities to install new homes. Group homes could be formed as long as the owner lives in the home. The owner could be a DD adult or a caregiver.

Golden Gate Regional Center helps their clients who live here, picking them up every day to go to their jobs or activities. The Big Wave

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farming operation could start now, giving the residents the proposed jobs in the nearby airport fields that are already being farmed.

This isn't the exact description of the wellness center, but it is available now. The hope that is being held out to these young people for a place they can live and work with their friends in their own homes does not have to wait or depend on the support from a controversial 225,000 square foot office and commercial development on a challenging site in an even more challenging economic environment.

(Inaudible.)

CHAIRMAN RANKEN: Kevin Cooke.

MS. KETCHAM: And we have very good drainage.

UNIDENTIFIED SPEAKER: Very good drainage?

MS. KETCHAM: Very good.

MR. COOKE: Good morning. I'm Kevin Cooke. I live at Pillar Ridge, and I'm here representing the homeowners association.

For all of the merits of this project, we have found that there are a variety of problems with the Draft EIR that need to be addressed. Not the least of which has to do with the drainage and

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flooding of the watershed.

The Draft EIR states that, quoting here, "Placing fill or other structures in such a way as to block existing drainage paths could result in increased off-site or on-site flooding, particularly if there is a significant off-site drainage that flows through the site. However, since no drainage report was provided by the applicant, it is unknown if there are substantial storm water discharges that would travel onto the site from neighboring areas, particularly the residential development to the northwest," end of quote.

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There is no mention in the Draft EIR of the significant portion of the watershed drainage west of Airport Street and north of Big Wave, which includes the community of Pillar Ridge, the open fields to the north, and the hillside to the west. The drainage follows a creek bed through the fields and then along the base of the bluff behind the Pillar Ridge community. All this drainage enters the marsh at one point through a badly-corroded, 36-inch culvert under the access road of the northern perimeter of the Big Wave office park parcel.

In December 2005 a Big Wave contractor clearing vegetation from this long overgrown access road with a Bobcat or similar equipment packed mud and vegetation into the marsh, totally blocking the culvert outfall. Several blocks of our community were flooded.

We were luckily able to locate the contractor on our own to resolve this emergency situation, but the mud and debris were just moved to an adjacent area of the marsh labeled Wetland A in the report. Big Wave never replied to our letters or pictures concerning this event.

The Draft EIR includes source control, best management practice, and regular maintenance of the storm drain system. Given our past experience with the applicant's maintenance of their storm drain system, the flooding it caused in our community, the lack of any drainage report in the Draft EIR, and the complete oversight in the report that this drainage even exists, we do not agree that there are no significant impacts regarding drainage at this project.

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Thank you.

CHAIRMAN RANKEN: Thank you very much, Mr. Cooke.

We have one more speaker in this portion of speakers representing other people. That will be Lennie Roberts.

UNIDENTIFIED SPEAKER: No. There are actually two more. There is another presentation followed by --

CHAIRMAN RANKEN: Oh, you do have one more?

UNIDENTIFIED SPEAKER: Yeah. (Inaudible).

CHAIRMAN RANKEN: Okay. Thanks for reminding me.

And Lennie is here on behalf of Committee for Green Foothills so she will get a little extra time.

(Inaudible.)

MS. ROBERTS: Good morning. I'm Lennie Roberts. I'm speaking for Committee For Green Foothills. And I'm going to do something unusual at the beginning here. I am going to say something out of context from my usual presentations on behalf of the committee.

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I want to say something very directly to the young adults and their parents who want a place to have a community. I am with you. I understand your point of view, probably more than you may know. My daughter, an adult daughter, who lives at

home, has cerebral palsy and depression. I worry about what will happen to her when my husband and I are not here anymore. But the -- I also want to point out that the animals and birds that live in the marsh and on this property before it was this also need a home. The birds that fly south for the winter need a place to rest along the way. Some of the animals and birds are endangered, which means their homes are almost gone. They do not have a choice to go elsewhere.

What has happened at the Big Wave property is very sad over time because much of what was the home of these species has been degraded or destroyed. I want to see what has been lost replaced. So -- I don't have my statement here.

The project site. The Pillar Point Marsh and its wetlands comprise a vital irreplaceable natural resource. Wetlands provide habitat for diverse wildlife, resting and feeding habitat for migratory waterfowl, food chains support for resident and nonresident species and critical habitat, for threatened and endangered species.

Statewide it is estimated that 91 percent of California's wetlands have been lost since European settlement. Back in 1861 the United

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States Coast Survey topographic map showed that the Pillar Point Marsh complex included approximately 10 acres of open water, and the marsh and wetlands with it extended over a much larger area than today. Over the past decades grading, filling, ditching, and draining for the Half Moon Bay Airport, construction of West Point Road, groundwater pumping from the Pillar Point aquifer, as well as farming activities have greatly reduced the open water and wetlands comprising the marsh complex.

In 1994, at the request of San Mateo County, the Army Corps of Engineers did a formal mapping of the wetlands at Pillar Point Marsh called a wetlands delineation. And that's what you see on this slide.

This delineation map shows a finger of wetlands that extends across the southern parcel where the Big Wave housing is proposed.

The Army Corps uses a more restrictive definition than the state does for wetlands so this image shows a minimal area. Please note the 100 foot buffer zone in which very limited uses are allowed is also not on this graphic. If the buffer is included, development on the southern parcel

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would be greatly reduced. That's what it would be just with that delineation.

In December 1986 a developer named J. L. Johnston brought in heavy equipment and disced under the wetland vegetation. San Mateo County attempted to stop this destruction of the wetlands by filing a notice of violation. J. L. Johnston's attorney, Michael McCracken, who is also representing this project, sued the County; and the Superior Court judge found that the land clearing was a routine agricultural activity and was exempt from coastal permit and grading permit requirements.

He didn't continue very long. And time passed, and the land was not in continuous active agriculture up until, once again, in June 2006 the current owners began discing, deep ripping, and bringing huge truckloads of soil onto the southern parcel.

The soil importation had the additional advantage of raising the elevation of the land so it would be more likely to eliminate one of the three federal wetland characteristics, i.e., soils which are wet. The developers and their advisors were hoping that by discing and filling the low wet

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areas they would be able to develop more of the site.

In June -- in 2006 the Big Wave farmer did not stay within the boundaries of the private property but also destroyed wetlands on the adjacent county park that was acquired to preserve and protect the wetlands.

This is looking from the site towards the county park land. And in the foreground is some of that encroachment.

A December 4, 2008, memo from Dave Holan to Camille Leung states, "For over three years now there have been agricultural operations encroachment over the property lines onto county park lands. This encroachment has involved filling and farming wetland historically met by the biologist for the U.S. Army Corps of Engineers prior to the County acquiring the Pillar Point Marsh to add it to Fitzgerald Marine Reserve. We would like to see this encroachment and conversion of the wetland on the county park property addressed and mitigated."

Mr. Holan also states that, "Agricultural land adjacent to the county property has also encroached on the Pillar Point Marsh wetlands

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previously mapped by the Army Corps of Engineers and not acquired by County Parks. We would like to have this conversion of wetlands addressed and mitigated."

The Committee For Green Foothills heartily agrees with County Parks. The wetlands on the southern parcel should be preserved for their scenic and environmental value and fully restored.

There are several alternative sites for their housing including a scaled back office park combined with the housing on the northern parcel; and another alternative is, as you've already heard, at the adjacent Pillar Ridge community, which has the advantage of having several spaces for low-income housing available right now.

Thank you.

CHAIRMAN RANKEN: Thank you, Lennie.

Okay. We do have one other presentation. Actually, this is another speaker, Laslo Vespremi, speaking on behalf of a different group. On behalf of I believe it's the Moss Beach Community Association.

UNIDENTIFIED SPEAKER: (Inaudible) signature tell me this (inaudible).

CHAIRMAN RANKEN: Okay. After this we will

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be taking a short recess and come back.

MR. VESPREMI: Thank you.

So I live in Moss Beach for 26 years. I have a business in computer graphics. My next slide is -- I push something here, right? Yeah.

I undertook to prove that the visual representation is faulty using Google Earth and also modeling, 3D modeling, to show the actual size of the project.

This is the perspective view of the project. And if I push this button, hopefully it will show the elevation.

(Inaudible).

Just click on this thing.

That was the next slide.

Can I just stick in the slide itself?

(Inaudible).

This is -- we will go with slide No. 6.

(Inaudible).

Okay. Just click on that picture, please.

Okay. This is an elevation that would show (inaudible).

Okay. I need to go to my next slide, I guess. So this is elevation that shows the area view slide (inaudible), the area and the actual

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scale of the project.

I have also undertaken views showing the same view as it's represented in EIR, and view files from the -- from the highway and Airport Road.

The top view is from the dock and bottom view is --

UNIDENTIFIED SPEAKER: Do you want to go back?

MR. VESPREMI: Yes.

Okay. Yeah. Click on the picture somewhere.

ROSARIO: What are you trying to do?

MR. VESPREMI: Just to play the animation.

ROSARIO: Animation. He wants to play the animation.

(Inaudible.)

MR. VESPREMI: Okay. Would it be possible for me to come back after the break and set up my own laptop?

Thank you very much.

CHAIRMAN RANKEN: Okay.

Okay. In that case we'll reserve the rest of Mr. Vespremi's time.

We'll take a short break, maybe five

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minutes, just a little bit more; and then, again, we have a lot of requests for people to speak and it will be your turn.

Is there anybody out there who has not filled out one of these cards yet?

There's a stack of them outside the door that you can fill out.

See you in five or ten minutes.

(Recess taken.)

CHAIRMAN RANKEN: Move this thing back and get moving. We have a lot of things to get through today, a lot of people to get through.

If you could please be seated now, and we'll start the meeting again.

Okay. We're going to continue by hearing from Laslo Vespremi again.

Once again, my apologies for technological issues up here; but I see you have your own computer set up so you can go ahead.

MR. VESPREMI: Thanks again for (inaudible). My computer (inaudible) just recall that I built models using Google Earth, and you can see the 3D view here in the slide through animation. So, actually, the buildings were modeled and placed exactly as per the DEIR provided

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maps. And then I take away the parking lot, that area, just simply showing the massing as related to the surrounding area. So you have the four large buildings on the right, and then the wellness center on the left, as it relates to the airport and the cardboard.

I am going to skip to the next slide.

I'm showing the same views as presented by the DEIR. And the point I'm making is that the computer modeling here at the bottom shows a much, much larger building than on the top.

There are a couple of reasons for it. No. 1, the DEIR placed the buildings right on the active runway instead of Airport Road, so it's quite obvious that it would be sitting on the runway. So it's farther down.

The second is you can also decide -- with 3D modeling, you can take a building that's the same height, which is this warehouse here, 24 foot, and extend it. And so if you double that, you get pretty much the same massing as before.

So if you compare these two pictures, it's quite clear that the buildings almost come up to the ridge line.

Another view that the DEIR shows is View 4

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from Airport Road. You can see the difference here between the Google view and the airport, the DEIR view. The reason is because they set the -- photo-shopped the horizon line up here. So you're basically looking at the development as you were 40 foot up; and in reality, you know, if you wanted to get a ground level view, this is what you see. So the graphics are very deceptive and misleading.

So, also, the DEIR states that there's no obstruction of -- it won't obstruct any bay views. The truth is, yes, it could be. If you are driving down on Highway 1, you know, you would see -- and I use again a Google drive view -- you would see how the building sticks look like in obstructing bay views from Highway 1 going south.

And this is a little bit of a drunken driving here.

So, moving on to the next slide. You don't see the 500-foot notification area; but basically it notifies the rabbits on both sides of the project, the airport, as well as the hillside.

A project this size needs to be notified to the affected communities, which include Montara, Moss Beach, Princeton, and El Granada.

So, I also did two weeks of informal poll

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at Moss Beach. And I took the names of the people who actually took this polls. And 60 percent never heard of Big Wave. So I think that the public notification process is flawed. And what we like to do is -- in conclusion is that without graphics and story poles, the public cannot judge the scale of the project.

The notification for traffic in this case is not really well taken for a project this size and impact; and missing parts of the DEIR, three of the topics, are also hindering the public review process. 32

As a result, we'd respectfully like to ask the County to continue the public comment period for area of flood and all persons -- that many residents sign petitions that the public comment period be stopped in February 2010, when Big Wave promised to put up the story poles; and, you know, we can move forward from there.

Thank you very much for your time.

CHAIRMAN RANKEN: Thank you very much, Mr. Vespremi.

Okay. Now we'll get started on the bulk of the people. Our time limits will change now. Those presentations that we just heard were by

prearrangement, people who are speaking on behalf of a number of other people.

The public at large will get two minutes per person. Two minutes because of the large number of people. That's -- each person will be allowed two minutes.

Yeah. We do have nearly a hundred cards here. So if you do the math, we'll be here -- at two minutes per person we'll be here for -- probably about until -- until a long time. Which is fine. We are here -- we are here to hear you. We're happy that you're here. But for fairness's sake, we do like the Board of Supervisors, what we do is establish a two-minute limit as there are so many people here.

I have a few things to mention. First of all, once again, we're happy to see so many people here. There will be -- obviously, there's a lot of people on both sides of the issue of this. And one thing you can do -- one thing I'd like to address, though, is this issue of applause. We understand that we have a lot of passions, again, on both sides of the issue, there's a tendency to want to applaud every speaker that speaks in favor of a view. One idea we got from my esteemed colleague,

Commissioner Slocum, former mayor of Menlo Park, is that instead of applauding, if you'd like to show your support for a point of view, you can simply wave your hand like this.

Now, that actually sounds very silly at first; but once you see it in practice, it's an excellent way of showing us the support of the audience that's there without any additional delay and noise that interrupts the flow.

Again, we're just trying to keep things efficient and so on. So if anyone wants to do that, that's fine. As far as applause goes -- no, I don't think doing the wave is appropriate, trying to coordinate that.

Again, it sounds silly; but it works quite well in practice.

The time limit -- again, with so many people I will be strict on the time limit. Two minutes goes by very fast. So, as you're waiting two and three hours for your turn, if you could try to -- sort of try to encapsulate what you're going to say in the most concise way as you can.

And I will cut you off at two minutes because after that it's, again, a matter of equity at that point.

And it's basically necessary with so many people.

And one other thing. If you do have -- again we'll be hearing from a lot of people on both sides. If your points have been made and when your name is called, you're welcome to either just come to the podium and state briefly that "I agree with these points," you don't necessarily have to elaborate on everything. Or, of course, if you like, when your name is called you can simply -- you don't have to come up and speak, you can pass if you'd like, of course. It's your option with your time.

But that being said, again I'm not at all by any means trying to discourage anyone. We do want to hear all of you. We are glad you're here, but I'm trying to balance the need to hear you with the need for efficiency and equity.

So, without further ado, one more.

COMMISSIONER SLOCUM: Thank you, Mr. Chairman.

I just wanted to state that I can try to see if it can be rescheduled; but way before this was put in on our schedule I have a doctor's appointment that I would have to leave for at

12:30. If I'm unable to reschedule it, I will assure everyone here that I will obtain the tape and listen to everyone's comments that I might not be able to hear today.

But it's further reason to try to be efficient and find ways to group together or indicate that you agree with someone because I think that really we can see that and we understand that.

CHAIRMAN RANKEN: Thank you, Commissioner Slocum.

Okay. Let's go ahead.

The first speaker will be Judy Taylor. Followed by Marc Passen and then Lisa McCaffrey.

MS. TAYLOR: Good morning. I was not aware of the arrangement to make time ahead of time. I am here representing the Chamber of Commerce.

Several years ago the Chamber of Commerce did an economic sustainability committee, and we had a number of hearings and did a survey. Of those who live on the coastside who commute, who have hiring authority for their companies, 70 percent of them said that they would relocate on the coastside if they could; 70 percent of those needed space between 250 and 1500 square feet.

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The Chamber of Commerce completely supports this project for a number of reasons. Part of it is that we do -- when you folks are looking at planning issues around transit and jobs, you tend to look at putting housing where the jobs and transit already are, but there's a corollary to that. We need to put jobs where the houses already are. This project is going to be a net benefit to the community, environmentally it restores habitat that is not there now, and it will take cars off of the road.

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We hear over and over again "it's a great project but this is just not the right place for it." It is very disingenuous and naive to think we can do anything anywhere that does not have some sort of negative environmental impact. It is very important that we weigh what those impacts are versus the benefits. And when we do that with this project, it's very clear that it comes down on the side of this is a good project for our community.

Thank you.

CHAIRMAN RANKEN: Thank you.

Get that. Again, seriously, that does seem silly; but it's -- we appreciate that very much. And it does give a sense for, you know, the

feelings of the people. It's important to us and important to you as well.

Okay. Next will be Marc Passen. Followed by Lisa McCaffrey and then Leslie Deman.

MR. PASSEN: Good morning. I'm Marc Passen, I live in El Granada on the coastside. And by the way, this is the deaf sign for applause. It's clear-cut.

But I also work for the California Department of Rehabilitation, and I'm a supervisor in that program when I'm not furloughed three days a month.

I'd like to read to you our mission. Which is "to work in partnership with consumers and other stakeholders to provide services resulting in employment, independent living, and equality for individuals with disabilities."

And I believe Nicole mentioned earlier that there is a high rate of unemployment among developmentally disabled adults, and that that percentage is actually very high. It's upwards in the 70 percent. 70th percentile. So our agency, along with nonprofit agencies here in San Mateo County, work very hard to try to find jobs that match the abilities of our clients. This project

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will go a long way towards helping the goals of our agency and of our clients and of our community. So I am here in favor of this project.

Thank you very much.

CHAIRMAN RANKEN: Thank you.

Next is Lisa McCaffrey. Followed by Leslie Deman and Kerry Burke.

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MS. McCAFFREY: Good morning. My name's Lisa McCaffrey, and I am a 17-year resident and property owner in El Granada.

I support the Big Wave project for many of the reasons stated by other speakers, which I thought of as (inaudible) before me. But I would also like to add that with unemployment in California at 10.5 percent as of February 2009, it's important to support projects such as Big Wave that will provide initial employment with its construction and continued employment after it's built.

After listening to the presentation today, I am excited by Big Wave; and would welcome such an innovative project to my neighborhood.

Thank you.

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CHAIRMAN RANKEN: Thank you.

Next is Leslie Deman. Followed by Kerry

Burke and then Ryan Moroney.

MR. DEMAN: Good morning. My name is Leslie Deman, I live in Half Moon Bay. And what I'd like to say is we've heard from a lot of people. There are always people that will throw roadblocks at every project; so I think your job is to kind of figure out what's significant, what's not. I think what we've heard is that on a net-net basis there are more positives than negatives. It will provide employment, green jobs, and opportunities. And as a 10-year resident of Half Moon Bay, I look forward to seeing this project go forward.

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Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Deman.

Now is Kerry Burke. Followed by Ryan Moroney, then Gregory Off.

MS. BURKE: Good morning. Kerry Burke, Half Moon Bay.

I have reviewed the DEIR, though perhaps I haven't read every single page. I did focus on four key areas: Consistency with the general plan, compatibility with the surrounding areas, adequacy of mitigation measures, and benefits to the community. The Big Wave parcels were deliberately

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designated for development by the County. And, also, the County certified an environmental impact report for those designations that did consider future impacts.

And, also, the proposed uses blend with all the surrounding land uses as Camille's graphics demonstrated.

This project is a logical in-fill development along access roads of Airport Boulevard. The project also includes many buffer zones; DEIR has mitigation measures; and, of course, the planning commission can establish additional conditions on this project for any potential impacts.

This shared use project is an innovative approach to provide some unique housing types and also jobs on the coastside. This project is truly an implementation of the LCP and warrants your due consideration.

Thank you.

CHAIRMAN RANKEN: Thank you very much.

Next is Ryan Moroney. Followed by Gregory Off and then Francisco Castaneo.

MR. MORONEY: Good morning, Commissioners. Thank you for this opportunity. My name is Ryan

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Moroney. I'm with the law firm of Wittwer & Parkin, and represent El Granada Sanitary District.

And I think I probably ought to just skip to my conclusion since I expect to run out of time. Essentially I'm going to be commenting on the sewer utilities portion of the DEIR. It's our position that it's an inadequate analysis and that more time is needed for assembling the sanitary district staff and consultants to get together with the applicant's staff and go over some data gaps and inconsistencies in that analysis. And we believe that the Draft EIR should be revised and recirculated after that takes place. 39

I do have a couple of letters that I tried to submit last week to be included into the agenda packet which did not make it. I only have 15 copies.

These are prior comment letters that we've submitted on Big Wave. And, basically, I'm not going to get into the details of them, but the essential point of those letters is the sanitary district is the responsible agency for this project because we have permitting authority over the sewer connection or the proposed wastewater hookup, which essentially my understanding is the applicant's 40

position in the EIR is that they do not need -- they're not going to be subject to GSD permitting because of the on-site facility.

And, in fact, we have an ordinance and the EIR actually acknowledges that it will have to connect to the sewer system under that ordinance unless there is some exception that is made.

But even if they built an on-site system, we also -- GSD also has ordinances that govern on-site -- regulation of on-site systems. So GSD is the responsible agency, and the draft EIR is not treating them as such. And so we think that ought to be changed.

Just real quickly there's also --

CHAIRMAN RANKEN: If you can try to wrap up. You've got 15 more seconds.

MR. MORONEY: Sure. No problem.

Essentially there's just a lot of data gaps and inconsistencies. Our obligation as a responsible agency is to submit mitigation measures to, you know, impacts that we have identified. And we're having a really hard time with that right now. We're putting a comment letter together and just hope that that can be considered.

Thank you very much for your time.

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CHAIRMAN RANKEN: Thank you very much, Mr. Moroney. We appreciate your comments.

Gregory Off is next. Followed by Francisco Castaneo and Holly Winnen.

MR. OFF: Good morning, Commissioners. Thank you for taking the time to hear me speak. I'm here today on behalf of the Big Wave Project. I do not live in Half Moon Bay, I am not a parent of a developmentally disabled child or adult, but I do -- I have nothing to gain one way or another if the wellness center office park is built.

I do however have a deep and personal connection with these amazing kids and their parents as their Special Olympics coach and friend. Having worked closely with each and every one of them for the last 7-plus years, I have seen a growing concern about what will happen to their DD children as they grow older. And I've seen firsthand what happens to these kids that are forced to live in group homes far away from the coastside and their friends, families, and loved ones. From neglect to overcrowding it's saddening to see that this has become one of the only viable options available.

Through Special Olympics I've also had the

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pleasure to work side by side with Jeff Peck. I can tell you that this man is not a greedy developer looking to make a buck off the back of the DD community. He is the epitome of integrity. And for the people that accuse him otherwise, they truly are ignorant and have not taken the time or have the open mindedness to learn what this project really is about. Jeff has tirelessly fought to fulfill his dream of providing not only his daughter with a place of her own but literally the entire coastside DD community.

I've seen the careful and thoughtful planning that has gone into this project for both the wellness center and the office park. The people behind it, from Jeff to the parents to the people who live on the coastside, are striving to give these kids a real life and an opportunity to live and blossom as fully functional, contributing members of the community. Their future is literally in your hands.

Thank you very much.

CHAIRMAN RANKEN: Thank you very much.

Francisco Castaneo. Followed by Holly Winnen and Naomi Patridge.

MR. CASTANEO: Good morning. My name is

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Francisco Castaneo, and I live in Moss Beach, and actually in the mobile home park. I been living for 25 years there. And I support 100 percent the project because I have a daughter with the same disabilities. And I, together with a lot of people, think it is a very, very good idea. And I believe they will approve this project because we really need it. And we will be happy to have our daughter very close and to see her, that she can really enjoy her life by herself.

We are not going to have any tsunamis, we're not going to have nothing because we been living for many years and probably it's going to happen in another hundred years we're gonna have tsunamis. I appreciate that.

Thank you very much.

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CHAIRMAN RANKEN: Thank you, Mr. Castaneo.

Holly Winnen is next. Followed by Naomi Patridge and Dave Worden.

MS. WINNEN: Hi. My name is Holly Winnen. That handsome guy that was on the screen with the orange hard hat, that's my son. And like others have said here, I really struggle with what's going to happen when I'm not around to help take care of him. Big Wave is a project that's a good project.

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And I think if you guys look at all the pros for this -- you know, do the Ben Franklin. You know, how many pros, how many against as far as reasons to go with this. I think it's a pretty much no-brainer. And I would challenge you guys to be different than the rest of our county process and become more expeditious and let's get this thing going.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Winnen.

Okay. Naomi Patridge is next. Followed by Harold Lott and Dave Worden.

MS. PATRIDGE: Good morning, Chairman Ranken and members of the planning commission.

My name is Naomi Patridge, and I am a resident of Half Moon Bay and also on the Half Moon Bay City Council. I'm here representing myself and not the city council. I do support the Big Wave project and especially the wellness center. The wellness center will provide jobs, housing, and independence for our disabled youngsters on the coastside. And I have worked with those young kids through the school district and through other programs, and it really saddens me to see that people don't want the wellness center because I

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think we owe this group of people a chance to have independence.

And my question to you is: If the wellness center is not built, what is the County going to do for the disabled?

Thank you.

CHAIRMAN RANKEN: Thank you.

Harold Lott. Followed by Dave Worden and Paul Perkovic.

Harold Lott?

MR. WORDEN: Dave Worden.

CHAIRMAN RANKEN: Okay. I'll put this at the bottom, give him another chance to come on up.

Dave Worden is next. Followed by Paul Perkovic and Carl Yoshimine.

MR. WORDEN: Thank you.

Deficiencies in the existing LCPs for both the city of Half Moon Bay and the mid coast have given us a very severe jobs/housing imbalance on the coastside. The Big Wave project will enable the expansion of job opportunities on the coastside, to keep more local dollars local, and help to alleviate the commute traffic crunch. I urge you to very enthusiastically support the Big Wave project and approve the EIR.

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Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Worden.

By the way, thank you also to the audience. We do notice your show of support. We appreciate that. Thank you.

Paul Perkovic is next. Followed by Carl Yoshimine and Mr. Johnson.

MR. PERKOVIC: Good morning, Mr. Chairman and members of the commission. My name is Paul Perkovic. I'm a resident of Montara, and I'm currently president of the board of directors of the Montara Water and Sanitary District. You have a written comment so I will not read everything to you.

I'd like to point out that today I am speaking on behalf of our board, and often I come before you and speak as an individual resident. And I'd also like to clarify for everyone in the audience and the planning commission that our board is an agency that provides water, sewer, and solid waste disposal services for our community. We do not, as a board or as a district, support or oppose specific development proposals within the community.

However, our board has found that the DEIR

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is deficient, incomplete, and incorrect for the reasons stated in the letter; and I'll give you the most important of those. The consultant failed to use the certified Local Coastal Program maps and policies to determine the correct utility service providers. The applicant, County, and consultant have failed to confer with responsible utility agencies.

The certified Local Coastal Program clearly shows that this project is within the service area of Citizens Utilities Company of California. Montara Sanitary District, in August 2003, acquired all of the assets, tangible and intangible, of the former Citizens Utilities' Montara District and became the Montara Water and Sanitary District.

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The district stands in the shoes of Citizens Utilities as successor in interest and is the only legally authorized public water supplier for the project. Plans to serve the entire former Citizens Utilities service area are included in the Montara Water and Sanitary District's master plan, and our public works plan is one which has been certified by the California Coastal Commission.

Montara stands ready to provide water for fire protection for this project. And the other

comments are already in the letter so I thank you for your time and attention. -47

CHAIRMAN RANKEN: Thank you, Mr. Perkovic.

Thank you.

Carl Yoshimine is next. Followed by Richard Johnson and David Beuerman.

MR. YOSHIMINE: My name is Carl Yoshimine, and I live in Anaheim, California. My wife and I flew up here to support the Big Wave project. We are grandparents of Devon Yoshimine, who has special needs. Our desire is to have him become a independent, self-sustaining member of this community where he can live and share his life. -48 And by the building of this Big Wave project it will really make him happy and give him the opportunity that our grandson is self-sufficient and will be of help to the community and likewise to others that live there.

Thank you very much.

CHAIRMAN RANKEN: Thank you very much for your presence. We appreciate that. Thank you, sir.

Richard Johnson. Followed by David Beuerman and then Karen Holmes.

MR. JOHNSON: Good morning. My name is -49

Richard Johnson. My wife and I have lived in Half Moon Bay for well over 20 years. I'm here to speak as a parent of a developmentally disabled adult to say the difficulty it is to find appropriate housing anywhere in the county. We've looked in situations in Belmont, we've looked in situations in South San Francisco. They have waiting lists that are very, very long. They often smack of warehousing (inaudible). The Big Wave project seems like a great idea of providing units for the kids and providing some work experience that will allow them to feel like they're useful, contributing members of society. So I just wanted to support very much the Big Wave project and hope you approve it.

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Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Johnson.

Daniel Beuerman. Followed by Karen Holmes and Jon Yoshimine.

UNIDENTIFIED SPEAKER: I think it's "David" Beuerman.

CHAIRMAN RANKEN: David Beuerman.

MR. BEUERMAN: Yes. Hi.

I'm David Beuerman. I'm a manager of regional center services for Golden Gate Regional

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Center for San Mateo County, and our agency provides services to just under 4,000 developmentally disabled individuals in San Mateo County.

And I've worked with this organization for -- with Golden Gate for about 19 years now trying to provide services to the individuals with developmental disabilities in San Mateo. What has been a consistent need for folks in San Mateo County is housing and employment opportunities on the coast. We don't have any kind of viable opportunities for affordable housing, including ownership, and employment opportunities for people who want to live and stay in their own communities.

In addition to that, the exciting part for us at the regional center about the Big Wave project is the fact that it is a privately driven and financed development and it's also very much centered on parent involvement and parent planning.

And in our current financial situation, where we are struggling to keep up with the demands and the needs for individuals for housing and employment opportunities, we need these kind of private efforts. And I commend the incredible time and energy that's gone into this plan, and I just

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want to be here to support this effort. -50

CHAIRMAN RANKEN: Thank you, Mr. Beuerman.

Karen Holmes is next. Followed by Jon Yoshimine and Marina Fraser.

MS. HOLMES: Hi. I'm Karen Holmes, and I'm here in support of Big Wave. I've lived on the coast for 20 years, where -- and worked. Where I've raised three daughters, the youngest of whom, Thea, who was pictured with a pumpkin on her head next to me, has learned to become an awesome adult. And I'm really looking forward to seeing the development of Big Wave. I think it would be a wonderful place for her to live independently but with the support she needs. And, also, the job opportunities provided by the office park. And -51 that relationship there would be wonderful.

We already live in a tsunami zone, we already live where earthquakes happen; but the real danger to Thea is not having the opportunity to really live fully as an adult.

Something's going to be built between the south end there on the property line with the tall metal building and the neighborhood Pillar Ridge. I think this is a real chance for the community to put something in that's beautiful, environmentally

sound, and produces jobs and a wonderful place for people in our community to live that benefit Half Moon Bay and the whole coastside as a whole. So I want to encourage you to help Big Wave.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Holmes.

Jon Yoshimine is next. Followed by Marina Fraser and Richard Sowle -- I'm sorry. Ruth Sowle, I believe.

MR. JON YOSHIMINE: Thanks for taking time to hear me. My name is Jon Yoshimine, and I'm an 11-year-old resident of Half Moon Bay with a son who's 18 years old with special needs.

And my comments today are directed toward Jeff Peck, one of the principals. And I know Jeff very well, and I just want to just underline a few items from my personal relationship with Jeff and what his heart and his commitment to the special needs community has been.

And my son and many other of his basketball team in Special Olympics basketball have been direct beneficiaries of Jeff's commitment.

In fact, Jeff brought Special Olympics basketball to the coastside about 10 years ago. And if you know coastside athletics, there is not a

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whole lot of opportunities for the DD community in terms of athletics. Last year there were 40 athletes playing hoops, having the time of their lives. One boy on my team is legally blind, and he comes every week to practice. And over the last few years he's been able to make a basket even though he's blind.

And Jeff has also brought his daughter Liz to our Sunday school class and to the coffee shop the last five years. Now, although his daughter has not been able to attend because she's been ill, Jeff still comes. And why does he do that? It's because of his love and commitment to the special needs community and to our kids.

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And this heart and commitment to me is what I see driving Big Wave. This project offers an opportunity for kids that are on the hoops team not only to make it on a basketball team but in life itself.

In this world we are making history for so many of the wrong reasons. Please, in good faith, make a decision that will be looked on in the future as a decision that was made for all the right reasons.

Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Yoshimine.

Marina Fraser. Then followed by Ruth Sowle and Aimee Luthringer.

MS. FRASER: Good morning, planning commissioners. Thank you for the opportunity to speak. I'm Marina Fraser, 640 Spruce Street, Half Moon Bay. I'm also on the Half Moon Bay City Council; but the views are my own, they do not reflect the City Council.

I'm here to support Big Wave for not only the wellness center opportunities for the developmentally disadvantaged youth, but also for the benefits of the office park. As you know, the work force on the coast, 70 to 80 percent of us get up and out on Highway 1 over 92 or north through Devil's Slide through Pacifica. All our jobs are located over the hill. There's an opportunity to take some of those cars off the highway and provide work force at the office center. That's another added benefit to the community.

The Princeton area does have light industrial and for many years San Mateo County has talked about doing an office park for some type of way to get workers to stay on the coast. Technology being that way, people don't necessarily

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have to go to a physical place in their job. This office park could provide another opportunity for the residents of the coastside to work there.

I'd also like to express the support of my parents, 40-year El Granada residents Thomas and Marina Fraser, who also support Big Wave.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Fraser.

Ruth is next. Followed by Aimee Luthringer and Pam Sayles.

My apologies if I got your name wrong, Ruth.

MS. SOWLE: Sowle. Just like your sole.

I'm here as just a plain resident of the coastside for 54 years. But I want to mention my friends Joey, Devon, Patrick, Eddy, Liz, Thea, Benji, and Vanessa who -- they're all in this room. And I love them dearly, and I want this for them and for others like them.

I didn't think that I had anybody in this category until I thought of my niece Kathy, who lives in Burlingame, 54 years old. And she has worked since she was 20 there on the Peninsula. She takes -- to get home to her home in Burlingame she has to take three buses, but that girl gets up

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every day and gets to work. She never misses a day. This would be perfect for her, something like this, you know, on the peninsula. But that's what they need.

We've got a place for our seniors and we also have our low-income housing. I think now is the time to let Wave come in and take care of all of these friends of mine.

Thank you very much for your time.

CHAIRMAN RANKEN: Thank you, Ruth.

Aimee Luthringer is next. Followed by Pam Sayles and Neil Merrilees.

MS. LUTHRINGER: I am Aimee Luthringer, and I live in Moss Beach. And I'm going to share with you a letter from a neighbor of mine, Rick Harding. And he'll relay the commercial real estate perspective to the conversation today. Rick is in real estate dealing in retail and office leasing in San Mateo County and Santa Clara County for the last 30 years, and he's done many marketing products on the coastside in that time.

First, office space absorption on the coastside. There is not much more than 225,000 square feet of office space currently between Pescadero and Montara on the coastside. You must

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consider that the applicant is proposing to double the existing inventory of commercial office space on the coastside in a site which does not have direct highway access or even adequate secondary highway access, and it's remote to goods and services.

Another detail, the office space absorption on the coastside is 15,000 to 25,000 square feet per year. And Big Wave may be privy to maybe half of that per year. If you take a phased-in approach, which experts, you know, advise taking the phase-in approach, it would take approximately 20 years to fill the full space at 10,000 square feet per year. So 20 years to occupy and fund the project feasibly.

The impact of the phased-in approach affects residents and visitors who will be putting up with intensive construction over an extended window of time, 20 years essentially.

Final point, entitlement application of the developer does not produce a resume of other projects completed as large or as costly as what is being proposed. What is to prevent the developer from taking the entitlements you give him, the permits you give him, and then to sell the land to

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someone else who may have an altogether different vision.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Luthringer. We appreciate that.

Pam Sayles. Followed by Neil Merrilees and Mary Larenas.

MS. SAYLES: Thank you for giving me this opportunity to talk today. My name is Pam Sayles, and I've been a resident in Half Moon Bay for 36 years. I have two sons that are developmentally disabled, one lives in Redwood City in an independent group residence because he's higher functioning than my other son, Joe, who lives on the coast and actually lives with me.

I'm a widow, I've been battling cancer; and I would like to die knowing that my son will have a safe and healthy, welcoming place to live.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Sayles.

Neil Merrilees. Followed by Mary Larenas and Iris Rogers.

MR. MERRILEES: My name is Neil Merrilees. I've lived on the coast for 22 years, and I'm totally sympathetic to the wellness project, to the

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wellness center. I totally relate to what they want to do. And I wouldn't pick that site, I don't think an industrial site is really the best place to put it; but you know they're the parents and I'm going to defer to them on that. But I do have some issues with the office center site. When you're talking with people just generally about the project, the first thing you hear, and you hear over and over again, it's just way too big. It will be the largest building on the San Mateo coast. If built, it would be the biggest office complex between Highway 1 and the pacific coast for 100 miles. It would double the office space on the coast, and all apparently with no significant impact.

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In terms of scale, where the office center is going to be is the only area that I'm aware of in San Mateo -- on coast of San Mateo County that has a height higher than 36 feet. When you look at other buildings that you think are large, this is going to be much larger.

And when you open up the EIR, it seems there are a lot of things that are mischaracterized. And one example is traffic. I think the impacts of traffic from the business park

are underrepresented in the EIR. The office park is 225,000 square feet and it's described as mixed use, office, manufacturing, and R & D.

When you look at the plans in the EIR you see the office buildings, not light manufacturing space. There are no roll-up doors, no loading docks, not even space to fit one loading dock on the site. The facilities plan we're told the buildings are surrounded be restored wetlands so there is no way of getting around buildings with a forklift. Which means there's no light manufacturing. Where is the light manufacturing or R & D space? Look at the plans, look at the windows. The proposed buildings are office buildings. Which means for parking they need 125 spaces, and the applicant is asking for 650. There is no extra land on the site for more parking. There's no place for it to go.

Thank you very much.

CHAIRMAN RANKEN: Thank you very much, Mr. Merrilees.

Mary Larenas. Followed by Iris Rogers and Dorothy Norris.

DR. LARENAS: Good afternoon. I'm Dr. Mary Larenas, and I've been a coastside resident for the

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past 30 years in Moss Beach. My doctorate degree is in clinical psychology, my master's thesis involved doing adapting psychotherapy techniques with a 70-year-old developmentally delayed individual.

I have a big concern that hasn't been noted here is the wellness center is all about being supported by the office park. What is the backup plan if the office park fails? What about future unpredictable economic downturns? To count, the coast already is inundated with empty office spaces, rooms for lease, homes for sale. If you look at that and fill those empty spaces, we don't need the office park.

It is a dream and a hope, not fact, the office park will succeed. Putting the well-being of these young people and the hopes the office park will flourish is dangerous and irresponsible. These young people deserve to have the right to be an active, integral part of our society; not isolated out by the end of Airport Road.

They are capable of more than cleaning offices and pulling weeds, as will be potential jobs that they will have on the office park complex.

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The clinical literature states that developmentally delayed individuals want to be part of society, to be teens like other teens, have the need for social interactions; they need the feeling of satisfaction that comes from being a part of everyday life. Putting them in a community where everything is inclusive and they're not allowed to actually get out or if they -- allowed, that's incorrect. They will not be included in the actual community at large, it is not appropriate and not acceptable for these people.

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Please let these young people live closer to town, be integrated in the town, to meet the rest of us, let us enjoy them as well as learn from them. They are a very special part of our world, we are all responsible for them. To have a office park be the sole financial backer of the wellness center is wrong.

CHAIRMAN RANKEN: Thank you, Dr. Larenas. We appreciate your input.

Iris Rogers. Followed by Dorothy Norris and David Vespremi.

UNIDENTIFIED SPEAKER: Hi. I'm Iris Rogers, coastside resident 52 years; and I currently live at 149 Borago, which backs up to Big

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Wave. And I'm also -- I'm for the wellness center of some kind but totally opposed to the office park.

The affordable housing community of Pillar Ridge was named for the salient geographic feature of its location, the ridge that rises up behind it. You have a sense of place. You can look around and see it is unique, with its landmark point, its harbor, it's bluffs and coastal scrub, its fields, marsh, and willows. Big Wave wants to build next door to our single-story homes a row of buildings so large that the ridge behind them will be hidden from view.

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They propose to plant or grow tall trees not seen around here to hide these buildings. The trees will not restore our sense of place. The proposed views along Airport Street, with or without the trees, will look very much like they could be anywhere, lost in an urban sprawl.

The Draft EIR states that landscaped and restored wetland areas would provide a buffer between the proposed project and the existing residential uses to the north.

This is literally a buffer consisting of a large parking lot, two dumpsters, and a narrow

grove of trees between a single-story residential neighborhood and 50-foot-tall buildings.

We need story poles so that the public, visitors, and residents alike can understand the visual impacts of this project. 59

CHAIRMAN RANKEN: Thank you, Ms. Rogers.

Dorothy Norris is next. Followed by Deborah Lardie and David Vespremi.

MS. NORRIS: Good morning, commissioners and coastside -- members of the coastside communities. I'm a professional biologist and trained in endangered species in California. I'm here to represent the frogs' point of view. The red-legged frogs.

The California red-legged frog has disappeared over 70 percent of its historical range. Having been one of the most abundant amphibians in the state, it is currently heavily endangered. We need to look at the biology of this animal to determine the effect of this project on its ability to thrive in the nearby wetlands. 60

It is well known during winter months the red-legged frog adult may migrate long distances to find suitable breeding ponds in wetlands areas. These animals may use stream corridors such as the

one that bisects the Big Wave project, however a paper bag budget in 2003, and I quote, "attempts to mitigate adverse impacts to the red-legged frog habitat for the designation or creation of movement corridors in areas scheduled for development are problematical. The tendency for frogs to move in more or less straight lines to target sites indicates that it would be difficult to attempt to channel movements through provisional corridors."

They also state "conservation of resource management planning for activities that alter local environments should strive to retain the well distributed array of natural habitat elements that provide a protective cover for red-legged frogs for a distance of at least a hundred meters from occupied aquatic sites. That is three times the size of the wetlands buffer.

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May I quick --

CHAIRMAN RANKEN: Ten more seconds.

MS. NORRIS: Okay.

I would like to ask the commissioners to take a thorough, objective examination of the document, in particular the mitigation proposals. Do they adequately address the problems on the project? There are alternatives for humans and not

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so much for frogs.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Norris. We appreciate your comments.

Deborah Lardie is next. Followed by David Vespremi and William Botieff.

(Inaudible.)

CHAIRMAN RANKEN: Okay. Thank you.

Okay. Vespremi. Followed by William Botieff and Debby Lesser.

MR. VESPREMI: Good morning. I am a long-time Moss Beach resident (inaudible) and I'm here to comment specifically on some procedural problems I see on this project. Specifically, let me start off by pointing out that Ms. Slocum's question about the project development plan would have been addressed in terms of how this project is phased had we been discussing a PEIR, not an EIR.

The PEIR would have been the proper mechanism for evaluating this project. It's a phased EIR that looks at how projects are specifically phased in with individual EIRs for each of the component parts. And I have an article that I will provide, a simple briefing on this process, the application of PEIRs in mixed-use

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communities such as the one we're describing.

Secondly, we're all speculating about vacancy rates on the coastside for businesses who are in the midsts of creating principle for jobs on the coastside. This may well have all been addressed had there been any construction development scheme as required by the zoning code. This is something that, by the way, you owe us; and we should have received your planning department's comments on this 10 days prior to a public hearing.

I've requested this numerous times. It does not exist or otherwise cannot be provided, and it is not part of the EIR that we're discussing today.

Finally, we have some major zoning problems with the two lots. The wellness center is zoned on W, which is, as we all know, waterfront zoning. I looked at the LCP, I also looked at the zoning regs; and this is an area that is reserved for a site cited on adjacent to the sea to be able to function.

You might ask why that's relevant. The reason that it's relevant is because waterfront is designed to provide a working waterfront harbor for marine-related trades and services, including

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aquaculture and aquacultural processes. That's not the wellness center. A sanitorium, by the way, there's an exception for; but that would be for a medical treatment facility, which this is not. 64

CHAIRMAN RANKEN: Wrap up, please.

MR. VESPREMI: Yeah.

The commercial complex is M1, that's a Marine 1 zoning, and the same applies to LCP as it does the sanitary regulations, and procedures have not been followed. 65

Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Vespremi. William Botieff is next. Followed by Debby Lesser and Lisa Hutar.

MR. BOTIEFF: Mr. Chairman, Commissioners, my name is William Botieff. I graduated from San Mateo High School in 1949. I've seen a lot of changes, a lot of growth in San Mateo. The town back then was, like, 12,000 people; now it's 100,000. This growth that we've had creates jobs and a better environment for our family and everything else. 66

I think that the Big Wave project is unique in that it's not funded by the government, it's privately funded. It's run by a private concern,

my tax dollars aren't going to go into this. Those people are taking all the risks and they're providing something, a wellness center, that is unique.

If we can get this thing built for these folks, they're going to have probably one of the most unique situations not only in San Mateo County but the entire state, and a lot of other states are going to look over here and say, "Boy, that's a wonderful thing that San Mateo County did over there for those folks."

I certainly hope that you people will support this. Thank you.

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CHAIRMAN RANKEN: Thank you, Mr. Botieff.

Debby Lesser next. Followed by Lisa Hutar and Barbara Kossy.

MS. LESSER: Hi. My name is Debby Lesser, and I'm a 15-year resident of Half Moon Bay. And my two children grew up there, including my son Benjamin, who is a 20-year-old young man with developmental disabilities.

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And I'm here today to speak as a parent, but I'm also the past president of the Golden Gate Regional Center and currently on the board for West Bay Housing, which is a nonprofit organization that

serves people with developmental disabilities in the attachment area of Golden Gate Regional Center.

And this is a great project. This is a model project. And I've seen through my, you know, years with the regional center, as well as just being a parent, other projects. This is a model. This, you know, combines wonderful housing; wonderful, you know, job, vocational opportunities. And this is something our community should support.

And it is written in the Lanterman Act as well that, you know, community living for people with developmental disabilities, you know, is something that is in our state. You know, it's something that I hope that our county and municipalities will embrace and support housing for our children with developmental disabilities now and into the future, as well as employment and recreational opportunities. This is something that Big Wave does for us now.

Thank you.

CHAIRMAN RANKEN: Thank you.

Before we get to (inaudible) actually, if we could, we're approximately half way done now. I wanted to say, first of all, thank you very much to the speakers. Everyone's been extremely concise

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and direct and to the point. That makes things easier for us and for all of us, and we appreciate that very much. On both sides of the issue as well as shows of support. It's important to us. We thank you for that.

I also wanted to give the planning commission this chance to -- we will be losing -- our legal counsel here will be leaving in a few minutes. I wanted to get the commissioners, if there is anything that has been brought up by the public at this point in the legal arena, if you'd like to take a chance to ask legal questions.

UNIDENTIFIED COMMISSIONER: I don't know whether it's the right question. I'll ask it. I have a letter here from Montara Sanitary District that says they're in charge, and I have another one from Granada Sanitary District that says close to the same thing.

How are we going to resolve this issue? Does that fall under you?

MR. NIBBELIN: It does, in fact, fall under us in our department. It's a matter that, frankly, isn't limited to this particular case. Again, this has been a matter of long, ongoing discussions.

CHAIRMAN RANKEN: I just (inaudible).

MR. NIBBELIN: And in any event, you know, this is a matter that's been of longstanding as between some of the districts out there on the coast. And it is something that we're considering, and certainly we -- in the context of this project -- obviously you've seen the correspondence, we're looking at it, and we'll certainly, as we have in other projects, be in a position to advise the commissioners as to whether or not there is anything in those disputes that would keep you all from taking the actions that are requested.

COMMISSIONER SLOCUM: Actually, could I just follow up?

So, in terms of the difference between a lead agency and a responsible agency, I understand that we could be designated as the lead agency, having sort of an umbrella responsibility for the land use planning. Is that kind of implicit in that the determination needs to be made as to who is the lead agency for responsible agencies, and then the question really is if we are the lead and they're the responsible, how do you engage the responsible agencies.

MR. NIBBELIN: Correct. I think that there

is no ambiguity about the fact that we are the lead agencies -- or the lead agency, rather. And the question really is whether or not they actually qualify as responsible agencies, including (inaudible) CEQA. And that's, frankly, as I said, a matter that's been longstanding discussions between the districts and in the context of many projects.

Sitting here today, I'm not prepared to offer a full analysis of what our respective thoughts are on it. We believe that we have, though, complied with what CEQA requires with respect to our interaction with the districts.

COMMISSIONER SLOCUM: So, I had a couple other ones. I had asked earlier on this question of the timing, the phasing, the idea of would there be a development agreement of some sort. Given the potential for timing and phasing and sort of what's the difference between that and vesting, paying attention to that. So perhaps that could be addressed.

I know -- I notice that the developer group did not address that. They might have something to say; but, I mean, certainly, legally, I'd be interested to hear about the vesting.

MR. NIBBELIN: Yes, Commissioner Slocum. I'll, at the time of the next hearing, be in a position to fully explain or present that to the commission.

COMMISSIONER SLOCUM: Well, I guess between now and that time, though, having a clearer understanding of the phasing and sort of the potential or the -- to understand what kinds of conditions we might need to put in to make sure that the wellness center can be successful with the kind of office development, and understanding what happens when, to make sure that this turns out to be what is being presented to be good fiduciaries and good stewards, if you will, on that.

I guess it kind of goes to this other question that was raised about the conceptual development scheme. That was raised, and I had never heard about that before. And so I guess I'm wondering if we don't get that information until the very last hearing, it kind of removes the possibility of understanding and helping develop the kinds of conditions we would need to -- or the thoughts we might need to have to make this succeed.

MS. GROTE: As we had pointed out at the

beginning, this is an informational hearing, this is an opportunity for you to ask questions. It's also an opportunity for the public to make its preliminary comments. So we are noting all of this, we'll be looking in much more detail to give you the complete responses that you need before you make a decision.

We are expecting that there will be a hearing at the end of -- I'm sorry, February 2010. It is quite likely it will take more than one hearing for you to sort through all of the information so we will have that as a complete package.

COMMISSIONER SLOCUM: I see. And just in that vein, in terms of what the time frames coming back to us, since I may have to depart for my doctor appointment if I don't get a call back (inaudible), is I had raised at our prior meeting the idea of a study session. If the various members of our commission and the staff would feel that that might be an efficient way to make sure that these kinds of questions can be answered and not have each one of the five of us contacting staff individually and taking up your time.

So, if I do have to leave before that

discussion can occur, it would be my thought that perhaps doing a study session like that significantly enough before the final hearings happen that we would be able to encompass those kinds of questions.

I've seen that in Menlo Park on large projects. It can be very, very helpful not only to the members -- the decision makers, but also to the public to hear that those kinds of questions are being delved into. And, obviously, we can study a lot of things -- we're all studying a lot and this EIR is a lot to bite off. So that's been on my mind; and I wanted to make sure if I do have to leave, that that can be discussed or if it's appropriate to just dispatch with it now. But that's it.

CHAIRMAN RANKEN: Thank you.

There will be -- we'll make a (inaudible) point of discussing that toward the end of the meeting, after the public meeting. Thank you, Commissioner Slocum, for reminding me of that one.

Any other questions for our legal counsel?

Thank you.

Okay. Back to the hearing.

Lisa Hutar is next. I apologize for the

delay.

After that we have Barbara Kossy and then Connie Fortino.

MS. HUTAR: I was nervous before, but now I had to sit there, and (inaudible).

CHAIRMAN RANKEN: There's a lot of pressure here. Don't worry.

MS. HUTAR: I really want to wholeheartedly support Big Wave. And I could have just sat back there and said I'm not going to get up and talk at all. However, the real issue is an issue for our family. I have three children, two of which have a lot of choices as they grow up. My third son Eric's choices are far more limited than my other two children.

I wanted him to come here today and be able to be part of talking so that you could meet him, but Wednesday morning is the morning that he works at Marshall's in San Mateo, and he was unwilling to give up that chance to go to work.

So this morning at breakfast I actually asked him what he would like to say to you. So, he said he wanted you to know that he is age 18 on December 1 of this year. That means I'm a man. My brother's in college because he's really smart. I

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guess I probably won't go to college. I will be leaving Hillsdale High, and I wanted you to see my graduation picture from Hillsdale High.

I want to live by my mom. She helps me sometimes; but I don't want to live with my mom, I want to live with my friends.

The Big Wave will allow Eric to live close enough so I would be there and his brother and sister, if they chose to live here, would be there to support him and help him; but he wouldn't have to live with us.

I think the great thing about Big Wave -- and other people have said it -- is we're not asking for the government to actually support us, we're asking ourselves to support this. So I hope you will also support this. Support Big Wave.

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CHAIRMAN RANKEN: Thank you, Lisa.

Barbara Kossy is next. Followed by Connie Fortino and Michal Settles.

MS. KOSSY: I'm Barbara Kossy. I live in Moss Beach. I served for four and a half years on the San Mateo County Resource Conservation Resources Board. Some of those years as the vice president. I'm currently on the San Mateo County Green Management Area committee, and I'm a graduate

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of the (inaudible) management program at San Francisco State.

There's a lot I like about this project. I think it -- I like the idea of jobs on the coastside and support for the DD community and people. But I think it's a good project but in the wrong space. San Mateo County has a commitment to preserving agriculture and open space. And I want to thank Lee for mentioning the discing of the wetlands previous to the agricultural use of the land in question.

But San Mateo County loses an average of 40 acres of agricultural land per year. That's just an average. And it's important that we maintain our agricultural base in this community because it's the beating heart of the San Mateo community.

Also, the land, the open space land, serves as a corridor for the wildlife that already exists. And this was brought up with the red-legged frogs. They don't just need a couple hundred -- they don't just need 10 feet to do their migrating, they need, you know, 400 meters at least. So it's important to not break up the land for -- to maintain the biological diversity of our wildlife.

And one more point: A green building, and

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I'm all for support of a green building; but a green building is not a brand-new built green building. A green building is a reused building. A green building is redevelopment. A green building is something that uses existing infrastructure, that uses electrical connections that already exist, that uses sewer lines that already exist. And, you know, no matter how, you know, you might have a bamboo floor; but if you could use a recycled redwood floor, that's way more green than making a bamboo floor.

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And in terms of green development, there might be other sites appropriate for this, perhaps the Oceana in Pacifica building.

CHAIRMAN RANKEN: Thank you very much.

Connie Fortino. Followed by Michal Settles and James Larimer.

MS. FORTINO: Let's see. Good afternoon, right? It's afternoon now.

Thank you for listening to all of us. And my name is Connie Fortino. I've been working directly with people with disabilities for 28 years.

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When I look back at the history of these -- my friends, they lived in ancient times all the way

to the 1800s, and it was brutal. From 1800 to 1950 people wised up a little bit. We had these institutions that were, quote, "run like zoos." And then in the '50s parents started creating services for their children, for their family members, for those adults with disabilities.

In the '60s you had JFK saying I want change. You had civil rights. The '70s laws were passed, and in the '80s to present it's about advocacy. I am here to advocate for the people that I work with directly on the coastside right now for this project. They're in this audience. And I go to their house every day and teach them about budgeting, cooking, transportation, laundry.

Believe me, the Big Wave project isn't about housing them away. I know these parents on a level that's intimate. They wouldn't have anything less than what is going on in the coastside right now, which is bringing their family members into the community, which I have seen firsthand. The team of people I led through Hope Services won the People Who Care awards. They're doing something different, innovative, and on the leading edge of what people are doing right now.

So these families, they know the sterling

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program. Believe me, they're not going backwards.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Fortino.

Michal Settles.

MS. SETTLES: It's actually Michal. You were correct.

CHAIRMAN RANKEN: Michal Settles.

Followed by James Larimer and Jennifer Gainza.

MS. SETTLES: Good morning, everyone -- or good afternoon as well.

My name is Michal Forest Settles, and I have owned a home in Half Moon Bay for 11 years, I've resided in Half Moon Bay for four years. And I also served on the Samtrans paratransit committee that looks at transit service for people with disabilities. I am not representing that group today, but I am on that committee and I have debriefed that group on this project, so they're aware of that and its status.

My comments are going to be in the form of Jay Leno -- in the form of David Letterman. I'm going to tell you the six reasons why I think you should support Big Wave.

No. 1, I'm the mother of a disabled

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developmentally delayed young woman that refused to come here today. And she refused because she takes classes at San Mateo college and she works for Harley Farms in Pescadero. And similar to another mother said, she is so concerned about not missing those classes. She said, "Mom, I can't miss my classes, you're going to have to go."

So I just want to let you know that these young people are very focused and very devoted and very involved.

No. 2 on my David Letterman's list is that this project gives us options for the disabled community that we haven't had before. A lot of people I know who are not disabled would like to be part of a project like this; so this is a very, very innovative thing.

No. 3, it's very creative. You've heard from all the discussions how creative it is. And it's also the creation of a very innovative community. And the idea of not taking advantage of that creation, I think, would be a misstep.

Also affordability, which we know in the State of California is extremely, extremely difficult for anybody to find affordable housing; and to have it in this scenario is outstanding.

And then my last comment, this is an opportunity to give back to a community that doesn't ask for a lot. They don't come and demand a lot, but this is an opportunity to let them know that they've been heard and that we care about them and we're going to look after them.

So thank you very much for your comments, and I know you've got a hard decision; but I feel very confident, excuse me, that you are going to make the right decision.

Thank you.

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CHAIRMAN RANKEN: Thank you, Ms. Settles. Thank you.

We appreciate the David Letterman format, but I should let you know they start with a high number and then count down to 1.

James Larimer. Followed by Jennifer Gainza and Terry McKinney.

MR. LARIMER: I'm James Larimer. I've lived on the coast for 22 years. I live in the unincorporated part of the coastside. And I'm also an elected official. I've been elected three times to the Coastside County Water District board of directors.

I handed in a letter that I -- with copies

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for each of you that I gave this lady that has a list of reasons for why I support this project. But given what's been said here, I want to mention something else. LAFCO (phonetic) recently reviewed all of the special districts on the coastside, and one of the conclusions they drew from this review was that this property is within the sphere of influence of the Coastside County Water District. Our infrastructure is adjacent to this property, and we have a secure reserve that's ready today to serve it if we are asked to serve it.

And, also, although we have taken no official position on this as a board, I'd also like you to know that there was an inquiry about a year ago about our willingness or our ability to serve this should we be asked and should it be determined that we should serve it. And the unanimous opinion of my board, stated in a straw vote at that point, was yes, we are willing and capable of serving them and would be glad to do it. I think this is a very fine project, I hope you will support it.

And the only point that hasn't been mentioned here, either in my letter or what I just said, is that here, us on the coast have experienced loss of our tax base as properties have

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been taken off the tax rolls to become open space, which is good. This is an opportunity to actually add something to the tax base which is also good. Our schools need support, our special districts need support, our community needs support. This is a great project, and I hope you'll support it.

Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Larimer.

Jennifer Gainza is next. Followed by Terry McKinney and Mary Law.

MS. GAINZA: Thanks. My name is Jennifer Gainza; and my sister is Emmy, she's developmentally disabled. Emmy has spent the last 18 years of her life in Half Moon Bay as part of the community. She went to elementary school, middle school, high school in Half Moon Bay. On the weekends you can find her working at the farmers market, and on Tuesdays she works at the local dentist's office.

Big Wave is very important to my family because (inaudible) they would allow Emmy to stay within the community that she's been a part of for so many years, but it would also give her an opportunity to live independently.

My brother and I both live in

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San Francisco, and my parents live in Half Moon Bay. And we would love to see Emmy live in Half Moon Bay so that we can continue to be a support system for her and continue to be a part of each others lives.

I hope that Big Wave becomes a reality, not just a (inaudible) for Emmy and the rest of the developmentally disabled community on the coastside and their community as well.

Thank you.

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CHAIRMAN RANKEN: Thank you, Ms. Gainza.

Terry McKinney. Followed by Mary Law and Terry Gossett.

MR. McKINNEY: Thank you. I actually live in Scotts Valley, Santa Cruz County. And my background, I've been on the -- involved with the mental health community and the veterans community. And in all of the public input they had, affordable housing is a top priority in all three of those communities. So I really want you to look at this as a broader topic than just the DD community because everybody is looking for affordable housing.

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And just for the veterans, if people can be moved out of Section 8 housing and affordable

housing and move into a project like this, this is going to open up affordable housing opportunities for other people as well. So I hope you take that into account.

One of the questions I would ask to you is, if this project is not approved, then what?

And my son has actually fallen into that crack, that thin one. He was adopted from Marin County. And when we had to place him, he was moved to San Francisco, he was moved to Berkeley, Concord, Stockton just because of availability of services and the needs of the services. So the services are out there, but they're in distant locations. And here's an opportunity to bring services right into your own community, which is really rare. And that's why people are here saying hey, here's something that's really innovative and creative because it doesn't happen everywhere else.

My son, eventually we found a placement for him in San Jose. And so to visit him we have basically, you know, drive to San Jose on either a daily or a weekly basis. And I'd also want to just note that we've been all over the Bay Area in placements, and you will not find a more dedicated group of parents then you have here in Half Moon

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Bay. And that's why I travel from Santa Cruz all the way up here on a weekly basis just to be a part of this community.

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CHAIRMAN RANKEN: Thank you. Thank you very much for your presence.

Mary Law. Followed by Terry Gossett and Barry Benda.

Mary Law?

Go on to Terry Gossett.

Followed by Barry Benda and Ellen James.

MR. GOSSETT: Thank you. My name is Terry Gossett. I'm from Moss Beach. I've reviewed the Draft EIR for the Big Wave project and noted all the elements to be very eco friendly, also designed to make a less significant impact on the environment. I think that's good. I do support the project wholeheartedly. The team, Big Wave team, deserves a lot of accolades for all their attention to the environment while designing a project creating an independent, sustainable, and inclusive community of people and business providing an opportunity for individuals. With your support, the Big Wave project will be an innovative model for environmental design for which our coastal community can stand proud.

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Thank you very much.

CHAIRMAN RANKEN: Thank you, Mr. Gossett.

Barry Benda. Followed by Ellen James and Jamie Barber.

MR. BENDA: Hi. I'm Barry Benda. And thank you for the opportunity to speak today. I'm vice president of an agency called Lifehouse that's a nonprofit. We provide residential services for people with development disabilities. I've had 35 years of working with people in the development of these buildings, I worked at Golden Gate Recreational Center for 28 years. And I met these -- most of these families maybe 15 or 16 years ago, and we were beginning at that point to talk about what kinds of resources were needed on the coastside. And my responsibility at the regional center was developmental resources. And they have really, after many, many years of going down many different avenues and trying different types of resources and looking at different kinds of government funding, the families finally, fortunately on their own, decided that they needed to just move ahead and develop their own plan. And I am very supportive of that. I was supportive of that when I worked at the regional center.

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And I feel that what they have come up with here is very much going to be in line with where we would like to see people with developmental disabilities living and working.

The issues of employment and housing have been discussed. The only thing that I would add to that is that it's been identified as needs for years and years. The figure I've heard of those that are unemployed or under -- unemployed or underemployed with developmental disabilities is around 80 percent. So I think that really demonstrates what this project could do.

Also, in terms of the housing, we talked -- people have talked about how little housing there is that's affordable. Most people, adults with developmental disabilities, live on their SSI or SSI and a small Social Security amount. And so if they are lucky enough to get a Section 8 voucher, they can sometimes find an apartment. But for the most part the Section 8 list has been closed for the last several years so that's not an affordable option for them.

Thank you.

CHAIRMAN RANKEN: Thank you very much.

Ellen James. Followed by Jamie Barber and

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Devon Yoshimine.

MS. JAMES: Good afternoon. My name is Ellen James, I'm an electrical engineer. I live in Moss Beach, and I work in Princeton on Stanford Avenue, conveniently contiguous to this project.

I'm here today to speak on behalf of the existing infrastructure since nobody (inaudible) and no one else is. I would like to remind this agency that there's no dispute as to the social worthiness of this project. That's beyond dispute. But there is the responsibility of this board to not approve a project that exceeds the capacity of the infrastructure to support it. -77

And, in fact, (inaudible) why it has been upheld all the way to the Supreme Court by the City of Petaluma when they sued for not allowing development to proceed greater than the capacity of the sewer system to support it.

So what I would like to address is in the missing section and part 4, which is energy. And I would like to convey some ideas as to scale. That this would use 381,030 kilowatt hours per month, which is the equivalent of approximately 1,000 residences. It would use 969,607 cubic feet per month of natural gas, which is the amount of gas --

natural gas used by 10,000 to 20,000 typical homes.

The report also cites that they would achieve peak load savings with a 600 kilowatt natural gas burning generator, which has to be run at capacity to be efficient. Now, peak load savings, which the report briefly explains and which I have a lot of experience with, is not about saving the environment, it's about saving money. They would actually, during the peak demand hours, when electricity costs the most, they would burn natural gas to make their electricity. 77

Now, I have a couple of questions relating to that which the EIR does not address. First of all, to do that you have to boil water to make steam to run the turbine. Where would that water come from? 78

And there's -- a related thing is what about the emissions that would come from burning all that natural gas.

Thank you very much for listening to me.

CHAIRMAN RANKEN: Thank you, Ms. James. We appreciate it.

We're a little more than 70 percent done now. Thanks again for your conciseness everybody.

Jamie Barber will be next.

I just wanted to -- just a slight break. I wanted to mention that all these -- as staff mentioned earlier, all of the comments you people are making, they are all taken into account on both sides of the issue. They'll be addressed, they'll be compared to what's in the Draft EIR now, and processed accordingly; and will all be incorporated in the final EIR.

So, again, it's extremely valuable for your presence. We appreciate it very much.

Jamie Barber is next. Followed by Devon Yoshimine and Zack Peck.

MS. BARBER: Hi. I'm Jamie Barber. And my husband and I, Steve Barber, along with the Pecks purchased the project property. We weren't sure what we were going to do with it; but then we all just had to look at Elizabeth, which is Jeff's daughter, and that became our inspiration.

I have three children that do not have developmentally dis- -- they're not disadvantaged that way, they have choices. They've gone to college. They don't need me after I die. But the rest of these kids I've met in this community do. And I would like to go out of this world saying I have done something to give back.

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And I made the mistake of reading some blogs just to see what the opponents are saying, and it was very poisonous and very awful to say that my husband and Jeff Peck are greedy, slimy scumbags. And also myself.

And I'm just here to say they are the most -- anyone that knows them would never describe them as that way. And the mentality of that is poisonous, and also just not right. So, I just want to say that.

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CHAIRMAN RANKEN: We appreciate your input. Thank you.

And Devon Yoshimine. Followed by Zack Peck.

MR. DEVON YOSHIMINE: Good afternoon. My name is Devon Yoshimine, and I'm here to represent Big Wave. Big Wave is a community where I and many other individuals will be happy to see soon. Big Wave is a housing and a stable community where mentally and physically disabled kids and adults of our community. To have this community built we'll have a place of belonging and we will be able to connect to the outside world. Please let this community be built.

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I have a dream to one day see us disabled

adults and children have somewhere to belong and be accepted by society. Search your hearts, and you'll realize all of you can make this dream become reality.

Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Yoshimine. Thank you.

Zack Peck is next. Followed by Teri Chatfield and Kathy Affeltranger.

MR. ZACK PECK: Hello, Board. I'm Zack Peck, I'm the son of Jeffrey; and my sister Elizabeth is going to be a future resident at Big Wave.

I've worked on the wetlands restoration aspect of Big Wave, and I've also been involved with the DD community in Half Moon Bay for over ten years now. And I'm a firm supporter of Big Wave.

The Coastal Act and local coastal plan call for affordable housing for the DD (inaudible) along the coast. It was mentioned that they could possibly live in the trailer park. But growing up as a youth in Half Moon Bay, I mean, there's been drug arrests there, half the fights I've heard about came out of the trailer park; and it just would not be a very safe place to live.

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Big Wave provides the perfect opportunity to ensure this promise is fulfilled without spending our taxpayer's money (inaudible). Not only will this project benefit the DD community, but it will benefit the coastal residents as well. The office park will allow growing businesses to remain on the coast, ultimately providing local jobs and assuring that much needed revenue will stay in the county.

Both the office park and the wellness center remain consistent with the Coastal Act. The Draft DEIR -- or Draft EIR proves this, and is readily available for the public to examine.

The project does not simply adhere to regulations, but will improve the environment through progressive methods involving conservation, recycling, and regrowth. I myself have been working on the wetland areas restoration aspect of the project, and I can assure you that it's (inaudible).

After years and years of planning, this project is undeniably all encompassing and thorough. It embraces environmental conservation, along with addressing economic and social needs of the coast. Look at this in perspective. Big Wave

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has the professional facts and research against the opposition's unsupported slandering and claims. Which seems more convincing to you? Big Wave supporters form a large tight-knit family, while the opposition mostly consists of a few bitter and unhappy individuals.

Once this project passes, and I'm completely confident it will, it may very well serve as a model for future development. Our current system for coastal development is biased and outdated --

CHAIRMAN RANKEN: If you can wrap up.

MR. ZACK PECK: (Inaudible) that Big Wave provides a catalyst for change.

CHAIRMAN RANKEN: Thank you, Mr. Peck.

Teri Chatfield is next. Followed by Kathy Affeltranger and Mary Lou Williams.

MS. CHATFIELD: I'm Teri Chatfield. I've lived in Half Moon Bay for about 27 years. I have two boys. I have twins that are 17, one of which has cerebral palsy. At this point in time, with his twin brother, we are going through college applications. We have received hundreds of postcards in the mail. Brian has received one from the Navy, which as soon as they see his wheelchair,

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it will be tossed out.

So, Jeffrey has tons of opportunities available to him, and Brian has none at this point in time. As you've heard from other parents here, there are waiting lists wherever you look. Brian will be turning 18 next July, and he will spend the next four years still in high school because that's where he can go and that's where he can be safe.

My son, out of this group, is probably the most what they would consider severe; but in Half Moon Bay he's just known as Brian. They don't look at him as if he has a disability, he's just another part of the community.

Something that doesn't get mentioned much because you hear a lot of people who want the wellness center but not in their backyard. This is our kids' backyard. They were all born and raised on the coastside. It's not like we went searching for a place on the coastside; it's where they live, it's where they've grown up, it's where they should be allowed to stay.

As far as listening, because this drives me crazy about the frogs, I'm as environmental as the next person; but it would seem that in Half Moon Bay everything that we have tried to do for

children, young adults has been centered around the red frog.

My friend Joey in the back has been waiting for the boys and girls center for almost 15 or 16 years now. He's now 34. He tells me, and it's a kind of a joke between us, that by the time any of this is done he will be in a scooter or have to have a cane. I would really appreciate if you could answer the question when will something come to San Mateo County that our kids can actually do.

My son doesn't say a lot of words. One of his favorite words is "outside." And Big Wave would be a place where he could always be outside and working. Thank you for that.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Chatfield.

Kathy Affeltranger. Followed by Mary Lou Williams and Emmy Gainza.

Let's try Mary Lou Williams, and we'll come back to Kathy later.

Mary Lou.

MS. WILLIAMS: Hi. Good morning, Commissioners. Oh. Afternoon.

My name is Mary Lou Williams, I'm a mother of a 26-year-old severely disabled son who is in a

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wheelchair. That's a key thing. There's only about five kids on the coast in wheelchairs. That's a big thing because access on the coast has been getting better, but it's very, very difficult. And electric wheelchairs are not exactly portable. When I moved here 15 years ago there was nothing for disabled kids. Kids were being referred to county mental health left and right because they were depressed, they were anxious, they were feeling totally alone.

So Coastside Mental Health came up with a club called Power Winner Rangers. Out of that the parents got to know each other. So out of that CPALS was formed -- which is Coastside Parent Action League -- for special needs children and adults.

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We got together and started planning. And that group grew from 5 families to our mailing list of 140 families from Pacifica to Pescadero. That is a lot of families. It's, like, 600 people.

Through CPALS came Special Olympics. And besides the basketball team, there's also the bowling league, the tennis league, and the swim team. Which by the way meets at the Ritz Carlton.

And then Hope Services came along to do the

transition work, recreation programs after the kids graduated from high school.

We were missing one thing. Housing. You've heard the rest.

Thank you.

Please support this project.

CHAIRMAN RANKEN: Thank you, Ms. Williams.

Emmy Gainza. Followed by Claudia Ann Frank and Bill Griffis.

MS. GAINZA: Hi. My name is Emmy. And the reason why I want Big Wave to happen is because I have a lot of friends here who really love and care about me and I don't want to stay there alone, I want to be surrounded by those people who love me.

CHAIRMAN RANKEN: Thank you, Ms. Gainza.

Claudia Frank. Followed by Bill Griffis and Patrick Winnen.

MS. FRANK: Hello. My name is Claudia Frank. I'm a teacher in Half Moon Bay, and I took a day off, a personal day. I have a parent in the audience who is on the other side of this project.

Anyhow, I am also the mother of a developmentally disabled adult, and I came here to speak on behalf of him; but also to have you think about the fact that the number of developmentally

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disabled adults is increasing. Every year in my classroom I have at least one student who falls in that category, and so the numbers will grow. And we do not have housing options in the area.

My son has been working for three years. As business goes down, he has just been laid off. I disagree with the opinion of the psychologist who says, you know, that maybe people don't want to believe testing. My son would love to have a job. He will be a custodian if he can get paid to do that kind of work.

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And he also is a member of another endangered species, the African American men who don't have a jail record. Which I'd like to keep him in that category, without a jail record. And I am concerned that without proper housing that's going to be harder. And it will also be harder for my students that I see every day when I look at their future.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Frank.

Bill Griffis. Followed by Patrick Winnen and Patricia Hanson.

Patrick Winnen. Followed by Patricia Hanson and Carlysle Ann Young.

MR. WINNEN: My name is Patrick Winnen. I like Big Wave. And I have a lot of friends, and (inaudible) Big Wave. And that's all. -87

CHAIRMAN RANKEN: Thank you, Mr. Winnen. Thank you.

Patricia Hanson. Followed by Carlysle Ann Young and Len Erickson.

Carlysle Ann Young. Followed by Len Erickson and John Lynch.

MS. YOUNG: Thank you. I'm Carlysle Young, I live in Seal Cove. My concern regarding the proposed Big Wave project as a nearby neighbor is threefold. There was very little notice given. Most coastside residents haven't even heard about it, nor do they have any concept of the huge scale it will impose on the area. 88

Two, the traffic study in the Big Wave draft environmental report makes only a slight mention of the huge impact the commute congestion will cause for the existing residents of the harbor area, both dollars and businesses, at the only traffic signal, Highway 1 and Capistrano Road, or on the residential arms in the Pillar Ridge community or of the Seal Cove community who habitually use the only other intersection for -89

ingress and egress. That is the intersection of Highway 1 and Cypress. This intersection has no nighttime illumination, no traffic signal, and is often backed up on sunny beach days when the person in front of the line wishes to turn left, causing a delay for everyone else behind them.

At the very minimum, the developer should be forced, as KN Properties was as developer for Harbor Village, to improve that intersection with extra turnout lanes, or a traffic signal needs to be installed. Please consider moving up the proposed time for mitigation of traffic to preconstruction and require CalTrans to install lighting at this critical intersection.

In the report that I read it's going to take 30 to 36 months prior to build out completion. So that is a lot of construction traffic before the five-year period when they might put in a light according to their plan.

No. 3, the willingness of the parents and the developer to place their own children in harm's way by building a residential community of developmentally disabled adults in a known earthquake and tsunami zone. The San Gregorio fault runs through the project that's the office

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park portion, and the tsunami evacuation route runs in front of it.

It's not as if there has never been a tsunami in the Princeton area before. Look back as recently as 1946 when the water from a tidal wave came inland a quarter mile. And that was a small one. It may be that we're due to have another one. Many of the cars parked on the proposed 640-space parking lot could be sucked out onto Airport Street as the wave recedes, blocking the tsunami evacuation route from adjoining neighborhoods of Princeton, Pillar Ridge, and Seal Cove with the debri --

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CHAIRMAN RANKEN: Can you start to wrap up, please.

MS. YOUNG: -- by the waves.

Yeah, I'm there.

With the debris brought in by the wave causing obstacles to prevent emergency vehicles.

The word tsunami in Japanese means harbor wave; and is ominously prophetic with the wellness center project that is to be called Big Wave. I'm concerned for the residents. It's a laudable project for special needs persons, just not in that location for heavens sake.

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CHAIRMAN RANKEN: Okay. Thank you.

MS. YOUNG: Thank you.

CHAIRMAN RANKEN: Len Erickson. Followed by John Lynch.

MR. ERICKSON: Hi. My name is Len Erickson. I'm from El Granada. I'm speaking as a local citizen. I had an original presentation but because of technical difficulties it won't be up there. You each have a handout so, of course, the audience won't be able to see it; but I want to make a couple of points here, then follow that up with (inaudible) testimony.

If you go to page 2 of the handout, you see a story pole. You may remember it from another presentation I gave a few months back. Although you see one of the views of Big Wave with the obstruction caused by the project (inaudible), the point I'd like to make is if you turn to page 3 -- and as you go through the handout, I'm going to leave it with you. The issue I have with the visual analysis that's been done is basically you've been given five pictures that have been cherry picked for position. What they've done is an analysis of each of what I call the view corridors that wrap around these five view

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pictures, and let you see what it looks like from different positions.

I think if you look at page 4, what you'll see is where they refer to the view from Moss Point Road -- if you're a resident, you think of it as a view of Pillar Point Marsh. Then you see there is extensive blockage there both at the end of the marsh when you're at the beach as well as the road (inaudible).

The last point I'd like to make, if you just turn to the end, the very last page here, you know, the point here people have asked about story poles. I believe that the current state of the art for reviewing a project like this is really professional evaluation simulation. What the developer did is not a simulation, it's really just pasting pictures into positions. And, in fact, it's mispositioned sometimes. And I assure if you look at this, there is some mispositions.

So, to get the accuracy, you need that.

Second, if you want to look at alternatives, such as flexibility of phasing, if you want to see what it looks like one after another, then you have to have some (inaudible) simulation framework to work with.

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You found when you looked at the smaller project that I spoke on several months ago, that you needed to move it so they just moved the whole set of story poles. Now, you can't do that with this.

So I think you're looking at some interesting considerations that may be useful for the community. Also, if you go to evaluate light impacts, you can't do that without an effective simulation. Thank you very much.

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CHAIRMAN RANKEN: Thank you, Mr. Erickson.

John F. Lynch.

MR. LYNCH: John Lynch, a 36-year resident of Half Moon Bay. And I have a diagram. But I want to address the Big Wave project and the many deficiencies that they have in the Draft EIR. A lot of the mitigation measures on that (inaudible) project are going to be deferred. Well, I want to talk about one of them, and that is water.

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If you -- the East Bay Municipal Utility District, otherwise know as eBay -- EBMUD, or whatever their name is, they will not allow any major development unless they have a proven source of water. Right now this project does not have that, and they have not done any mitigations. And

before this becomes a final EIR, that needs to be addressed as well as many of the other ones.

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Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Lynch.

We do have a few speakers left. I want to make this the last call, though, if there's anyone who would like to speak.

I still have Molly Rice, Kerrie DeMartini, Robin Rourke, and Merrill Bobele. As well as a few I'll call the names of that I've called earlier. But if there's anyone in the audience who would like to speak, who has not spoken yet, then this is the last call and go ahead and fill out one of these cards that are located right outside the door.

These are the people who did not show up when they were first called. I'll read quickly through their names. If any of these people are hear now, please come forward. Harold Lott, Deborah Lardie, Mary Law, Kathy Affeltranger, Bill Griffis, and Patricia Hanson. They've all gone home. To the rest of you who haven't gone home, thank you so much for your patience. It's been a long run, but it's important that you've stayed and we're happy to have your input.

Molly Rice will be next. Followed by Kerrie DeMartini and Robin Rourke.

MS. RICE: Hi, I'm Molly Rice. I am a Seal Cove resident. And I first want to say that I'm not directly opposed to this project as a resident, however I am concerned about the traffic. I think that both entrances into this area are already very congested so I think that needs to be addressed further. 94

Also, the viability of the commercial aspect. I see a lot of vacancies in the commercial areas already in the harbor, and I just don't understand how those office buildings are going to be filled.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Rice.

Kerrie DeMartini. Followed by Robin Rourke and Lee Fernandez.

MS. DeMARTINI: Hi, my name is Kerrie DeMartini; and I support Big Wave both as a long time resident and as a professional. I have worked with individuals with developmental disabilities for 13 years now, both from institutional settings, group homes, in home, and most recently education here -- or there on the coastside. 95

I've never heard of anything as wonderful and awesome as Big Wave in all my looking for jobs, looking -- doing research in school. This is a unique project that really needs to happen. It kind of takes everything that these individuals need and puts it in one building. It's great.

I was born and raised on the coastside, and now am raising my family on the coastside; and I would love for this to be in my neighborhood. For these individuals to live right across the highway, for them to be able to stay in their home town just as I was able to stay in my home town. -95

CHAIRMAN RANKEN: Thank you, Ms. DeMartini.

Robin Rourke. Then Lee Fernandez, then Leonard Woren.

MR. ROURKE: Good afternoon. I'm Robin Rourke, I'm a 45-year resident of the coastside. I'm a landscape designer-builder involved in sustainable landscapes, permaculture, water conservation. I'm excited to see the Big Wave project take place. I think that it would be a great model for all of the positive aspects of it. I think it's going to be a revolving door of success. I think as far as the office park is concerned, I personally know of some heavy hitters -96

in Intuit, Oracle, Apple Computer; and I can see that this type of office complex could be very attractive for numerous reasons for this type of a venture; and so I hope that it's supported along those lines. I think it's going to be a real plus, especially with the cost of the rents over here.

Also, I have a younger brother who was disabled developmentally. And it was a long time ago, and these type of places didn't exist then. He fell through the cracks, and it was a very sad situation; so I don't want to see that happen again.

Thank you.

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CHAIRMAN RANKEN: Thank you, Mr. Rourke.

Lee Fernandez. Followed by Leonard Woren and Merrill Bobele.

MS. FERNANDEZ: Hello. Thank you for this opportunity to speak to the commission.

I'm a resident of Redwood City. And I came here today with a fairly open mind, listening to what was being said by both sides; and I have to say I'm struck by one thing, which is there's a huge need there on the coast; but this is a very small project. And I can foresee because it's private, they're going to be hand-picked residents.

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This is a concern to me. I'm an advocate for children and disabled children, I've worked in the child (inaudible) field for many years. And I do have some concerns about the disappointment that's going to be inevitable. And I don't know how this can be resolved. I don't know. But it feels very exclusive.

Thank you.

CHAIRMAN RANKEN: Thank you, Ms. Fernandez.

Leonard Woren. Followed by Merrill Bobele.

MR. WOREN: Leonard Woren of El Granada. I was not planning on speaking today, but in answer to Commissioner Bomberger's questions, I feel that I need to clarify the record regardless of what your counsel stated. Granada Sanitary District has complete authority in this area. There is no conflict with Granada Sanitary and Montara Water and Sanitary. Montara does not have sewer authority there. It's within the service area of Citizens Utilities that they purchased, and they will be allowed to be the water providers outside of CCWD's jurisdiction. So I don't see any conflict.

And I just note that I'm not officially speaking for the district. Our board meeting is

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tomorrow night. You've already heard from the district counsel; but I would like to point out that, idealogically, the local districts are correctly treated as responsible agencies. It's been a struggle to get printed copies of the Draft EIR. And the statement in the Draft EIR that there is -- that it's in dispute as to whether we have sewer authority, that -- I mean that's a ludicrous statement. And they're playing both sides. They're saying, well, GSD doesn't have authority and yet they're saying, as a backup to their treatment plant, they're going to connect to the sewer system.

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And they're also saying they're going to dispose of excess storm water by putting it in the sewer system. Well, that's not allowed under our ordinance code.

If we try to change the ordinance code, I guarantee the Regional Water Quality Board will step in and say you can't do that. So there's huge technical difficulties in Chapter IV.N regarding sewer authority, regarding sewer service; and these conditions need to be remedied.

Thank you.

CHAIRMAN RANKEN: Thank you, Mr. Woren.

Our last speaker is Merrill Bobele.

MR. BOBELE: Good afternoon. Commissioners, I've spoken before you before, okay? The correct pronunciation is Bobele.

CHAIRMAN RANKEN: I think I've made that same mistake about five times, but I'll make it again next time. The memory is not quite what it used to be, I'm sorry.

MR. BOBELE: You're telling me.

As you can see, I'm probably one of the oldest parents of a developmentally disabled adult daughter here today; and I'm speaking in that capacity, although I have other interests as well. I've lived in El Granada for over 30 years. My daughter is 45 years old, and I have experienced, I think, all of the feelings and emotions that some other family members have expressed here today.

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I also have to point out that we have a little bit of a history lesson. I don't go back to the 1800s that was referred to by one of the speakers, but there is a great deal of change in services that are available for the developmentally disabled today than there were for my daughter, who was educated in San Mateo County from 1976 on. But I also have to point out that, although I support

the concept of the Big Wave, I have to mention that in my experience as a member of the Golden Gate Recreational Center board of trustees for six years and eventually chair of the client services committee, which provides the services to which many of the speakers have referred to, that it's not the only model out there for residential services or for employment.

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CHAIRMAN RANKEN: I'll give you another minute.

MR. BOBELE: Yeah, please.

But I have to point out that the proposal for the residents that's called Wellness Center Sanitorium hasn't really been vetted by the agencies, both governmental and nongovernmental, which serve the developmental community in San Mateo County. The Commission for Disabilities, which I, as yourself, is another commission appointed by the Board of Supervisors, has not even had a conversation with any of the proponents of the Big Wave project.

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The speaker from the Golden Gate Regional Center -- actually, there are two, one is a retired member -- that have mentioned some of these programs, but it just happens that the housing task

force of the Golden Gate Regional Center has basically been disbanded. And it would be the logical group to vet the proposal. That hasn't been done. Unfortunately, the -- some of the deficiencies or omissions from the DEIR that was presented to you do not address a lot of the issues which I think need to be discussed, and I will include that in a written statement.

Thank you very much.

CHAIRMAN RANKEN: Thank you, Mr. Bobele. And I will try to get that right next time. I apologize I didn't.

MR. BOBELE: It will be my turn next time.

CHAIRMAN RANKEN: Okay. That is the last comment I have from the public. Do I hear a motion to close the public hearing?

UNIDENTIFIED COMMISSIONER: I so move.

CHAIRMAN RANKEN: Do I hear a second?

UNIDENTIFIED COMMISSIONER: Second.

CHAIRMAN RANKEN: Okay. To close the public hearing, we have a motion and a second.

All those in favor?

UNIDENTIFIED COMMISSIONER: Aye.

UNIDENTIFIED COMMISSIONER: Aye.

CHAIRMAN RANKEN: Aye.

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UNIDENTIFIED COMMISSIONER: Aye.

UNIDENTIFIED COMMISSIONER: Aye.

CHAIRMAN RANKEN: All those opposed?

(No response.)

CHAIRMAN RANKEN: That carries five to zero.

I should clarify, this is just closing the public hearing for this particular meeting, although the comment period itself will remain open until December 22nd.

UNIDENTIFIED COMMISSIONER: December 24th.

CHAIRMAN RANKEN: 24th. I apologize.

UNIDENTIFIED COMMISSIONER: Christmas Eve.

CHAIRMAN RANKEN: Christmas Eve. So, again, there is the opportunity to continue to submit comments and put on this until that time.

I wanted to thank all of you again for your conciseness on the issues, for being so direct and to the point. It makes our job much -- both easier and also more effective (inaudible). So thank you very much for that on both sides.

I want to assure everyone that the comments here will be incorporated -- all these comments will be incorporated into the EIR. It's an important part of the process. Thank you for that.

Okay. Comments from the commission? Perhaps questions for staff?

UNIDENTIFIED COMMISSIONER: I have a couple.

CHAIRMAN RANKEN: Go ahead.

UNIDENTIFIED COMMISSIONER: I was struck reading through --

COMMISSIONER SLOCUM: Excuse me. I'm having trouble hearing my colleague. We are, you know, continuing so --

UNIDENTIFIED COMMISSIONER: I'll wait.

I used to do water and wastewater so I spent some time looking at the water sections. I'm sorry I didn't get to see section N because it wasn't in the copy that was mailed to me. And I'm looking forward to seeing it when it arrives.

In the Utilities section there is at least an observation that's made by the preparer of the EIR that the water balance doesn't agree with the water balance that's been done around the project in terms of what's drawn, what's recycled, and what goes into the ground by infiltration. So I guess it would be my hope that before we see this again that that be remedied.

The other question that I had related to

that was you see a water balance, but we haven't seen anything that deals with salts. And my recollection from the old days, when I used to do this, was you run water through a house and you may pick up as much as 300 parts per million total dissolved solids, miscellaneous salts and other kinds of things. And if you are recycling, you may end up with a higher concentration. And this was all then going to be dumped in the aquifer one way or the other. And I think the issue at least needs to be discussed and addressed. It may not be a problem, but we have no information in order to make a decision on something that could be interesting.

I am hoping that when we get this back again some of these issues about whether the project can or cannot connect to the sewer, whether they can connect to the sewer in wet weather and not in dry weather essentially will be resolved because I certainly know that the entire sanitary system over there has a severe wet water problem. Or at least it has, and I'm not aware of it having been resolved. Because pipes are old and the ground gets wet, and water flows in. So wet weather input is the last thing that they really

need without some changes to the system. Or that's at least what I remember, and so I need to know more about that.

Um -- and I guess -- let's see. What was the other thing I wrote down.

If they redo the water balance, it seems to me that we would be looking, as part of the EIR process, looking at the mitigations that are down in Utility 2, 3, 4, 5 and 6. And I would hope that those come before us before -- and issues are resolved before we go to the final project. Because I would be interested in knowing what's going to happen before I can decide whether issues have been resolved correctly.

And then I certainly would like clarity on what's the issue with water supply. Can Big Wave be -- given the restrictions on water supply between phase 1 and phase 2 and what the Local Coastal Plan calls for, can Big Wave be supplied water from the system? Can the office park be supplied water, or are they bifurcated in water availability? I need some clarity on that.

It helps understand why we're driven to a -- essentially a reverse osmosis plant on well water. And if that persists, I would like to know,

when you look at a project that has that, I think we need to address what happens with the concentrated waste stream that comes off the water system.

CHAIRMAN RANKEN: Any comments?

Commissioner Slocum.

COMMISSIONER SLOCUM: I just wanted to reinsert the question about the study session. You know, this is a very, very voluminous document; and it would be certainly helpful to me to do that, if it would be helpful to you all, to consider having some kind of study session when we have enough information to proceed in that direction but far enough before the final hearing so that anything that results from that can be captured in a timely way. So I don't know if that needs to be some kind of motion or to just have a discussion. I leave it to you.

CHAIRMAN RANKEN: Yeah, let's hear from the other commissioners, their thoughts on the study session. As I understand, the rationale is twofold. One is to allow us to have a more efficient chance to get these questions aired and answered by staff; and the second is to have it open to the public as well so the public can see

that these questions are being asked and seriously considered.

So if there are any thoughts from the commission on that, I'm happy to hear them now.

UNIDENTIFIED COMMISSIONER: When would you propose that take place? Before the final EIR is issued?

MS. GROTE: If I can interject. The close of the public comment period is December 24th. We had anticipated a hearing at the end of February, probably around -- I think it's February 24th or 27th. So perhaps the end of January for a study session. January 20th is a Wednesday. That's a possibility.

We do have scheduled two meetings in January, the 13th and the 27th. So this would be a third meeting, it would be a study session. You might also want to discuss whether or not to have it on the coast. We usually use El Granada Elementary School for off-site meetings on the coast. So you might want to discuss that.

January 20th is a possibility. There are certainly other dates.

The 19th is a Tuesday.

You probably want to discuss daytime

meeting, nighttime meeting, that kind of thing.

CHAIRMAN RANKEN: Okay. Thank you.

Are there any other thoughts about a study session?

COMMISSIONER SLOCUM: Can I just ask a follow-up?

CHAIRMAN RANKEN: Yes.

COMMISSIONER SLOCUM: So, I guess the (inaudible) for having as much of the information that we might have, things which you guys can be doing, but not waiting until it's too far down that, you know, we don't have adequate time remaining. So if you're -- do you think that there will be that kind of information by the 20th? Or do you think that it might be better to look at early February?

MS. GROTE: Well, I need to consult with our consultant, the project planner. The 20th date is almost right in the middle of the close of the comment period and then the next anticipated public hearing; so that's why I'd chosen it. But let me talk to our consultant.

COMMISSIONER SLOCUM: Okay.

UNIDENTIFIED COMMISSIONER: Yeah. And I'm of the ilk that if a study session helps

Commissioner Slocum, then that helps me.

COMMISSIONER SLOCUM: You are so sweet.

UNIDENTIFIED COMMISSIONER: We're here to help, you know.

COMMISSIONER SLOCUM: Wait a minute. You don't know how much you've helped me, my friend. You know, Solomon the wise.

UNIDENTIFIED COMMISSIONER: Mr. Chair, I'm not sure I would really agree to have another meeting. Just I don't have a problem if we do a site visit or we -- something similar to that; but sitting down, having another meeting going over -- I guess the question I -- let me ask another question. Sorry about that.

Would the study session be open to the public to comment? Or to -- public -- you know, if that's the case, then I'm totally against it. I'm sorry.

COMMISSIONER SLOCUM: The way -- if I might respond. What I had in mind is sort of the way it's been done in Menlo Park on large projects. Where there's already been an opportunity for the public to talk about the EIR, and there's going to be an opportunity for the public to come and talk about the FEIR. It's really not going to be for

the public to talk, but rather for the commissioners to then bring our best questions that we have, having gone through this document, and really try to deal with those up front, in a way that is visible to the public.

And that the staff would have an adequate amount of time to take a look at the kinds of issues that have been brought up, that are, you know, likely to be things that we might want to delve a little bit more into and get more understanding of as we're getting ready for the final, you know, hearings.

And I've seen it to be very, very effective in being efficient for the time of the staff.

UNIDENTIFIED COMMISSIONER: I don't disagree with you, Commissioner. But my next question is that counsel's not yet -- I'm no attorney. Then would all that form (inaudible) because it's a public meeting, then a public meeting does require public -- what do you call it? Testimony or public --

MS. GROTE: Study sessions, first of all, are usually open to the public. Now, how the commission structures running that meeting, typically it's an opportunity for the commission to

ask staff questions. Certainly those that were asked this morning, not only by the commissioners but members of the public, would be topics that would be covered at a study session.

They're generally less formal. It's an opportunity for dialogue back and forth. They are open to the public. We would be making -- sending out public notices saying that the commission is holding a study session. So in that respect it's a public meeting. But how much additional public input you want at the study session, different commissions handle that in different manners.

You may want to have an opportunity for the public to ask additional questions, or you may just want them to listen to your discussion and interaction with the staff and our consultants. So that's -- there's some possibilities there.

But we would notice it to the general public.

UNIDENTIFIED COMMISSIONER: I do know that the study session that we always had is always out -- as I recall, is always out where the site is, and is basically for us to look at the site and study the site and then compare that to the EIR or whatever questions we have at that time.

So it's just that we have never done it in a forum where you're sitting here like -- it's almost like it's a meeting.

MS. GROTE: I think what we've had in the past on the sites are site visits. And they are -- again, there are some opportunity for questions to be asked during site visits. The commissioner isn't -- the commissioners aren't at that time indicating whether they support or don't support a project. But the difference is those are site visits conducted on a particular site.

Whereas a study session, you can do it off-site -- off-site meaning not in this room -- or you could have it in Room 101 over at 455 County Center. You can hold those study sessions in a variety of locations. Having it in the community has certainly been done before in the past.

This commission doesn't hold a lot of study sessions. You've done site visits, not a lot of study sessions.

UNIDENTIFIED COMMISSIONER: Well, if there was one, then I must have missed it.

UNIDENTIFIED COMMISSIONER: I don't think there have --

UNIDENTIFIED COMMISSIONER: I don't think

you've been here when we had one.

UNIDENTIFIED COMMISSIONER: That's correct.

UNIDENTIFIED COMMISSIONER: I think I can remember us doing it.

MS. GROTE: And you have. And they're certainly in your bylaws, they're called out as a possibility. So it's certainly a tool to use.

CHAIRMAN RANKEN: I have a suggestion I think might help a little. In Pacifica what we would do is we would have the study sessions on the same day as the regular meeting. Which raises the possibility simply of tacking it on essentially tacking on a study session to the end of, say, our January 27th meeting. I'm not sure if anyone wants to be here all day, but that's a more efficient way than scheduling for a new meeting. That gives us the opportunity to ask the questions when they come up.

Again, the point of the study session is basically to ask any questions that we have, and I think that's a possibility.

COMMISSIONER SLOCUM: I think that that is a possibility. However, I think that my understanding of what I have in mind is you would have the EIR consultants, you'd have the relevant

experts that would be necessary, and that would be a lot of time that they would need to be sitting there waiting for us to get to their thing if we did it after an uncertain set of agenda items in terms of their length. So I'm actually -- I'm open to ideas of how to make this be efficient. So, you know, maybe there's a way to do that.

I was thinking that if -- I know that in Menlo Park one of the things that has happened in the past is for the planning commission, if there's not a new topic, in other words there is no new question, no action that is going to be taken, if it's just, you know, continued study of an existing set of information, that there would not be, you know, an intention to have specific additional public comment. So that there could be time to focus on that, and still affording the public plenty of opportunities to have public hearings in the official time frame.

So, my -- I think that a combination where we could maybe go see the site and then go to a place near it and then have the study session or vice versa -- you know, ask questions either way -- might be really great. I can certainly arrange to visit the site, you know, on my own. But, you

know, that's sometimes helpful -- things do come to mind when you're sitting in mind of the terrain itself.

CHAIRMAN RANKEN: The timing of the meeting -- is this -- another option is to simply start the meeting at 8:00 instead and set aside one hour for the study session. Would this be available at 8:00 in the morning on, say, January 27th?

MS. GROTE: We would need to look into that. I believe it is available at 8:00, but we can ask Rosario about that.

The other thing I did want to mention as you're having your discussion is that we are held to certain requirements via the Permit Streamlining Act and CEQA as to when decisions -- final decisions or recommendations need to be made on this project.

So, as you're looking at whether or not to have a study session and when to have it, do keep in mind that, based on our schedule, the first decision making hearing in late February, and possibly a second one in late March, should you need that second one, is within those permit streamlining deadlines.

To move it further out would be problematic. We would start running up against those ultimate deadlines we have to have a decision made. So I just want to put that into your -- for your consideration when we're talking about study sessions. I think it's a way to say we need to be careful that the study session doesn't inadvertently add more time to the review of the project. That's what I'm trying to figure in into that general time frame.

Thoughts from Commissioner Bomberger on a study session or not?

COMMISSIONER BOMBERGER: I'm all in favor of a study session. I think it's -- let me ask another question. Are we planning on holding the second hearing, the EIR hearing, are we planning on holding that over on the coastside?

MS. GROTE: That was something I wanted to talk to the commissioners about. Again, you can have off-site meetings. You've certainly done it in the past. And I know that they pose some challenges for everybody, given our schedules and finding an off-site location and things like that; but that's something I would want to talk with you about.

COMMISSIONER BOMBERGER: I would then propose, if we're going to do that, that we have our study session over here at a time that's convenient to us.

COMMISSIONER SLOCUM: Yeah, and speaking of times convenient, I actually was able to reschedule my appointment, but I now have to leave for it. So I -- what I'm hearing is that there's at least three of us interested in doing a study session, and that I would certainly think that it would be more appropriate, since there's not going to be a public hearing element to it, to do it here. And I'll leave it to you and staff maybe to figure out some suggested times to do it that would fit with the legal limitations.

UNIDENTIFIED COMMISSIONER: The 28th is open to you too?

COMMISSIONER SLOCUM: Yes.

Thanks. And if someone could address story poles, that would be awesome.

MS. GROTE: Okay.

Rosario was going right now to check on the availability of this room on the 28th.

UNIDENTIFIED COMMISSIONER: Mr. Chair, would you give us five minutes?

CHAIRMAN RANKEN: Yes, let's take five minutes.

(Recess taken.)

(Commissioner Slocum not present.)

CHAIRMAN RANKEN: Okay. Let's wrap this up now.

Like I said, current order of business is we seem to have agreement we'll need a study session of some sort. We're trying to settle on the time. As I recall, the choice was either sometime on the 20th of January, alternatively the 8:00 a.m. meeting on the 27th.

UNIDENTIFIED COMMISSIONER: I guess -- I don't know whether we're going to be done in an hour. It helps focus your attention; but I would rather, frankly, have a separate meeting. And I say that as someone who's semi-retired so it's no big deal to me, so you guys have to talk about it.

MS. GROTE: I can give you a few days Rosario has found. That on the 20th of January this room's available from 8:00 to 10:00 a.m., so two hours. Or in the later afternoon at 5:30 p.m. to 10:00 p.m. So those would be the available times on the 20th.

Now, if you wanted to move it out to the

27th, it is available all day, this room. However, we do have a meeting earlier that day in our regular room from 9:00 to 12:00 or so.

It's also available all day on January 13th; however, we do have a regular meeting on the 13th. And then January 6th it's available from 1:30 to 5:00 p.m.

CHAIRMAN RANKEN: What's Room 100 look like?

MS. GROTE: 101?

UNIDENTIFIED COMMISSIONER: 101. We need to check that so we can get that information out. The other -- certainly, whenever we do have this meeting, we can give you all of the information we have to date. If new information is requested, we have to be very careful at that point because that will delay potentially the publication of the Final EIR.

So that's when we start getting into that question of the Permit Streamlining Act restrictions and requirements and, then, also CEQA requirements. So we need to be mindful of that at all points.

Okay. We do have Room 101 scheduled on Mondays for planning commission uses should you

need it, whether it's a public study session or other use; but we do have Room 101 on Mondays in the afternoon, I believe it's from 1:30 to 3:00.

ROSARIO: I have to check. Yes.

MS. GROTE: So that would be -- in January that would be Monday the 4th, the 11th, or the 25th. The 18th is President's Day. I believe. Not President's Day, it's --

UNIDENTIFIED COMMISSIONER: And somebody comes in after 3:00?

MS. GROTE: We can double check.

ROSARIO: Yeah. The person's not there right now available to check.

MS. GROTE: So we have to get back to you on that.

UNIDENTIFIED COMMISSIONER: Monday is fine with me. I don't know about the rest of you.

ROSARIO: We have the room Mondays before the planning commission meeting, so only twice a month. So it would be the second Monday and the fourth Monday.

CHAIRMAN RANKEN: On the possibility that the dates and the fact that we may need longer than an hour, I'm actually not retired yet, I tend to plan a travel schedule around this meeting. So

it's -- if it's possible to schedule it all on one day, I think that's good.

How about the possibility of 8:00 to 9:00 a.m. on the 27th of January, having all the consultants we may need from the outside there at that point so that any input can be given then. And then if we need to go on, we can continue with the study session after the regular meeting on Wednesday, allowing a long study session, as well as allowing all the input from our consultants (inaudible) as well as keeping it on the same day. Would that seem reasonable?

UNIDENTIFIED COMMISSIONER: That's okay.

What's on that meeting?

MS. GROTE: The agenda has not been set. I believe we have three items, but there may be one more.

That agenda has not been set. We don't set it until about two weeks before the actual meeting.

UNIDENTIFIED COMMISSIONER: I see.

So we don't know if it's going to be three consent items, if we go bang, bang, bang, or whether it's going to be three items like this one.

MS. GROTE: It won't be three items like this one, but it could be three regular items.

CHAIRMAN RANKEN: Also, just in general I've had a lot of study sessions. In Pacifica we always held them to one hour. It's true it does put a boundary on it, but it may need more information than that. But on the other hand it's -- since the purpose of it is to answer our most significant questions, I think that anything -- if for some reason we are unable to finish in an hour, then we can always continue with questions in another forum.

UNIDENTIFIED COMMISSIONER: In the interests of people who are not retired, that's fine, we'll try. What the heck.

CHAIRMAN RANKEN: Thank you.

UNIDENTIFIED COMMISSIONER: Real quickly maybe I'm missing something here. I'm sorry Gail's not here because the reality is she's probably going to have more questions than I am. Which is great. I see no reason if she's got them, or we've got questions now that we can't throw them to the staff sooner than later, and let them deal with it. And if we need to have copying to other commissioners through that process, that might satisfy some of this as well. Which would then allow the limitation of an hour to be more

palatable.

CHAIRMAN RANKEN: That sounds reasonable to me.

UNIDENTIFIED COMMISSIONER: Does that work?

MS. GROTE: That would certainly be fine. You can certainly send those to us. I wrote down several topic areas. I can run through those with you if you want to confirm that those are the main areas you also heard. I heard these not only from the commissioners, but from the general public. Is that worthwhile or --

CHAIRMAN RANKEN: Is this the kind of thing that could be wrapped up by e-mail as part of the process that you're getting questions from the commissioners?

MS. GROTE: That would be fine.

CHAIRMAN RANKEN: Okay. So --

UNIDENTIFIED COMMISSIONER: We're going to do it on the 13th?

MS. GROTE: I thought I heard you say the 27th.

UNIDENTIFIED COMMISSIONER: 27th?

MS. GROTE: Yeah.

UNIDENTIFIED COMMISSIONER: Okay.

MS. GROTE: I thought I heard you say start

at 8:00 in the morning on the 27th, go for an hour, have our regular meeting; and if more time is needed, to come back and have additional discussion.

UNIDENTIFIED COMMISSIONER: Okay. Let's try it.

CHAIRMAN RANKEN: Okay. Let's move along then.

Correspondence and other matters.

MS. GROTE: There are no correspondence or other matters at this point.

CHAIRMAN RANKEN: And a study session. Took care of that.

Director's report.

MS. GROTE: Only to reiterate upcoming schedules. December 9th we are having an off-site meeting at College of San Mateo on the Ascension Heights subdivision proposal. Before that -- that starts at 7:00. So at 6:00 there will be dinner provided for the commissioners if you're able to make that 6:00 time.

Then we are having the two meetings in engineering on the 13th in which the Highlands subdivision is returning to your commission. And then, also, now the 27th with the study session,

regular meeting, and possibly additional study session after that.

UNIDENTIFIED COMMISSIONER: Just to follow up on that, on the Highlands, have you took roll that there is based on -- are you going to be here, Chris? Oh, you are. Okay.

It would be -- so just making sure there are three commissioners. I know I won't be here, so Commissioner Dworetzky --

MS. GROTE: And Commissioner Dworetzky is stepping down for that particular item. So there will be three people in the room, that's Commissioners Bomberger, Ranken, and Slocum.

And then on December 9 we did want to confirm we have a quorum for December 9th.

UNIDENTIFIED COMMISSIONER: I just -- I don't have a GPS so can I get directions for where the meeting is?

MS. GROTE: Yes.

CHAIRMAN RANKEN: And who -- on December 9th will you gentlemen be there?

UNIDENTIFIED COMMISSIONER: I'll be there.

CHAIRMAN RANKEN: And we do have a quorum?

UNIDENTIFIED COMMISSIONER: As far as anything is certain.

CHAIRMAN RANKEN: Yeah.

Okay. Any other comments on the director's report?

MS. ROBERTS: (Inaudible).

CHAIRMAN RANKEN: Thank you, Lennie.

MS. GROTE: Yes.

I am reminded that the Board of Supervisors will be considering the final recommendations of the Local Coastal Program update on December 1st here in these chambers. And then the Coastal Commission will be considering the item on December 10th. And that will be in San Francisco.

CHAIRMAN RANKEN: That's all, then.

Thank you again to both of you. Thank you for coming and giving your input here.

The meeting is adjourned.

(End of transcription.)

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STATE OF CALIFORNIA)

) ss

County of San Mateo)

I hereby certify that the foregoing transcript of the November 18, 2009 Planning Commission meeting was transcribed by me from a CD recording to the best of my ability, and that the transcript is a true record of that recording.

I certify that I am a duly certified shorthand reporter in the state of California, and a disinterested person.

I further certify that I am not interested in the outcome of the said action, nor connected with nor related to any of the parties in said action nor to their respective counsel.

IN WITNESS WHEREOF, I have hereunto set my hand December 4, 2009.

KELLIE A. ZOLLARS, CSR No. 5735

C. RESPONSE TO COMMENTS RECEIVED AT THE NOVEMBER 18, 2009 PLANNING COMMISSION PUBLIC HEARING

Presentations presented at the meeting are provided in Appendix B (Presentations from the November 18, 2009 Planning Commission Public Hearing) of this FEIR.

Response to Comment PC-1

Ms. Slater-Carter states in the interest of a green and environmental County all future public meetings regarding the DEIR should be held in the evening and located on the Coastside.

Comment is noted.

Response to Comment PC-2

Ms. Slater-Carter states that she is a member of the Montara Water and Sanitary District Board but is speaking as an individual.

This statement is introductory. No response is required by CEQA.*

Response to Comment PC-3

Ms. Slater-Carter states that the traffic light mitigation is flawed, as the traffic light should be installed prior to construction to mitigate impacts from construction traffic.

This comment expresses an opinion regarding the sufficiency of mitigation measures provided in the DEIR. Table II-1 (Summary of Significant Environmental Impacts and Mitigation Measures) in Section II (Summary) of the DEIR identifies all mitigation measures included in the DEIR. It is assumed that the commenter is specifically referring to Mitigation Measure TRANS-1 (Intersection Level of Service and Capacity) which requires the applicant to submit a bi-annual report, signed and stamped by a Professional Transportation Engineer in the State of California, to the Community Development Director of the Planning and Building Department and on the level of service at the intersection of Cypress Avenue and SR 1 stating whether or not this location warrants a signal. If it meets warrants, then the applicant shall coordinate with CalTrans to pay a fair share for the installation of a signal within 5 years of the date of that report.

The commenter states that the traffic signal included in this mitigation measure should be installed prior to the start of construction, since the proposed project would result in a high amount of construction traffic. However, as discussed in Section IV.M (Transportation/Traffic) of the DEIR, under Impact TRANS-8 (Construction) on page IV.M-41, impacts related to construction traffic would be less than significant. While no mitigation measures are required, mitigation (Mitigation Measure TRANS-8, Construction) is

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recommended to further reduce adverse construction traffic impacts. Additionally, refer to Topical Response 8, Traffic and Parking Impacts.

This comment is noted for the record and will be forwarded to the decision-making bodies as part of the FEIR for their consideration in reviewing the project.

Response to Comment PC-4

Ms. Slater-Carter asks where construction workers will be parking during the building process of the proposed Big Wave project.

Construction workers will park on-site on stabilized areas outside of delineated wetlands areas and buffer zones. Construction parking would be required to be in compliance with Mitigation Measure HYDRO-3 of the DEIR.

Response to Comment PC-5

Ms. Slater-Carter asks where staging for the construction activities will take place.

All staging during construction is required to occur on-site, as noted under Mitigation Measure TRANS-8 (Construction) on page IV.M-41 of Section IV.M (Transportation/Traffic) of the DEIR. Since all construction activities would be staged within the project site's boundaries, no staging would occur at the Half Moon Bay Airport nor on the proposed restored wetlands.

Response to Comment PC-6

Ms. Slater-Carlin asks if the on-site farm will be on the airport.

For a detailed discussion of the project's proposed farming operations, refer to Section III (Project Description) of the DEIR. It is a project goal to lease land at the airport that is currently not farmed.

Response to Comment PC-7

Ms. Slater-Carter states that Moss Beach has three affordable housing sites, and suggests affordability from one of those sites be transferred to the proposed Big Wave site.

This comment is in regard to affordable housing. The commenter notes that three affordable housing sites are located within Moss Beach and expresses an opinion that transferring the affordability of one of the three sites to the project site should be considered. The County, in its Local Coastal Program (LCP), designates sites as affordable housing. Designation of the current site as affordable housing would require a LCP amendment. Such amendment to the LCP is not being pursued at this time by the County or the applicant.

Response to Comment PC-8

Ms. Slater-Carter states that the views shown do not depict the views from Highway 1 moving from north to south.

Views of the project site are provided in Section IV.A (Aesthetics) of this DEIR. Five specific views are provided, including:

- View 1: Looking south across the project site from Airport Street;
- View 2: Looking west across the project site from the intersection of Airport Street and Cornell Avenue;
- View 3: Looking northeast toward the project site from Mavericks Parking Lot;
- View 4: Looking southeast across the project site from North Trail; and
- View 5: Looking southwest across the airport toward the project site from Highway 1.

Provided in Section IV.A of the DEIR are existing views of the project site, in addition to visual simulations which illustrate the project site immediately following construction with all landscaping planted in addition to the project site fifteen years following construction with full tree growth and mature landscaping.

This comment claims that the views provided in Section IV.A of the DEIR do not show the views from Highway 1 moving from the north to the south, which is a critical flaw. However, as noted on page IV.A-5 of the DEIR, View 5 is representative of motorists traveling north and southbound on Highway 1. The view from Highway 1 (Cabrillo Highway) looking southwest is of the Half Moon Bay Airport in the foreground and the project site and forested hills in the background. The land from this vantage point is located within the airport's southern approach zone and is therefore not expected to be obstructed by vegetation or development.

Response to Comment PC-9

Ms. Slater-Carter states that the DEIR used a set of EPA standards from 1980 with regard to the septic system and states that the current standards call for the ground level to be 8-11 feet below the bottom of the trench.

As discussed in Section III of the FEIR, the septic drainfields proposal has been eliminated. Wastewater options are clarified in Section III.A of the FEIR.

Response to Comment PC-10

Ms. Slater-Carter states that water is an undetermined source and that the proposed project should not remove water from the existing lands.

Refer to Response to Comments 231-6 and 231-12.

Response to Comment PC-11

Ms. Brennan states that she is speaking on behalf of the property owners in Seal Cove.

This statement is introductory. No response is required by CEQA.*

Response to Comment PC-12

Ms. Brennan states the potential dangers of seiche waves and tsunamis. The commenter then presents and describes several photos from the aftermath of the 1946 tsunami which impacted Princeton and defines a seiche. The commenter questions whether the project is prepared for such an event, but does not state a specific concern or question regarding the sufficiency of the analysis or mitigation measures contained in the DEIR.

This comment starts with quoting a portion of the discussion provided under Impact HYDRO-9 (Expose People or Structures to Inundation by Seiche, Tsunami, or Mudflow) on page IV.H-61 of Section IV.H (Hydrology and Water Quality) of the DEIR. As noted under Impact HYDRO-9, the proposed project could expose people to inundation by tsunami and seiche, which represents a potentially significant impact. However, with implementation of Mitigation Measure HYDRO-9 (Exposure to Tsunami and Seiche) impacts from exposure to tsunami and seiche would be reduced to less than significant levels. Section III of this FEIR discusses HYDRO-9 implementation. Refer to Section IV.H (Hydrology and Water Quality) of the DEIR and Topical Response 9, Tsunami Hazards.

Response to Comment PC-13

Ms. Brennan states that structures should be placed at elevations above those likely to be adversely affected during a tsunami or seiche wave.

Those mitigation measures suggested by the commenter are included in Mitigation Measure HYDRO-9 (Exposure to Tsunami and Seiche) on page IV.H-61 of Section IV.H (Hydrology and Water Quality) of the DEIR, which would reduce Impact HYDRO-9 (Expose People or Structures to Inundation by Seiche, Tsunami, or Mudflow) to a less than significant level.

Response to Comment PC-14

Ms. Brennan states that the proposed project would place residential and commercial structures within the tsunami zone.

For evacuation procedures, refer to Topical Response 9, Tsunami Hazards.

Response to Comment PC-15

Ms. Brennan states that the San Andreas Fault, just off the San Mateo County Coast, has the potential of causing a tsunami without any warning time.

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Potential project impacts to emergency access routes are discussed in Impact TRANS-4 of the DEIR. For earthquake evacuation procedures, refer to Topical Response 9, Tsunami Hazards.

Response to Comment PC-16

Ms. Brennan asks why the County only required a 500-foot notification radius.

The County requires a 300-foot notification radius for this project application. Regarding project noticing, refer to Response to Comment 49-1.

Response to Comment PC-17

Ms. Brennan asks why story poles have not been put up.

Refer to Topical Response 1, Story Poles.

Response to Comment PC-18

Ms. Brennan describes the images regarding the Fitzgerald Marine Reserve shown in the slide show presented.

This statement is informational. No response is required by CEQA. The local setting with regard to biological impact analysis is provided on page IV.D-1 of the DEIR.

Response to Comment PC-19

Ms. Ketcham states that the DEIR discredits designated affordable housing sites due to their various site-specific implications and suggests that the proposed project consider using the Pillar Ridge manufactured home community as an option for affordable housing for DD adults.

The suggestion is noted.

Response to Comment PC-20

Ms. Ketcham states the Pillar Ridge manufactured home community has an adequate drainage system.

The comment is noted.

Response to Comment PC-21

Mr. Cook asserts that the DEIR fails to address the portion of the watershed drainage west of Airport Street and north of the proposed project; he continues to illustrate an alleged incident concerning the proposed project's drainage system and the neighboring Pillar Ridge mobile home community.

Refer to Response to Comment 185-34.

Response to Comment PC-22

Ms. Roberts states that the animals and birds currently inhabiting the Big Wave property also need a home and asserts that much of their habitat has been destroyed.

An analysis of potential biological impacts of the project is provided in Section IV.D (Biological Resources) of the DEIR. The project will provide additional habitat space and trees in the restored wetlands and uplands landscaping than what is currently on the site.

Response to Comment PC-23

Ms. Roberts gives a timeline of wetland destruction on the Coastside as well as in the State of California and discusses the 1994 Army Corps of Engineers mapping of wetlands on the Wellness Center site.

Regarding the alleged wetlands destruction, refer to Topical Response 13, County Permit History.

Response to Comment PC-24

Ms. Roberts narrates a scenario in which she alleges that a former property owner, unrelated to this project, did not stay within the boundaries of the private property but also destroyed wetlands on the adjacent County park.

Refer to Response to Comments 193-2 and 193-35. Also, refer to Topical Response 13, County Permit History.

Response to Comment PC-25

Ms. Roberts states that the wetlands on the southern parcel should be preserved for their scenic and environmental value and fully restored.

Comment is noted. The project alternative described by the commenter is considered in the DEIR, under Section VI (Alternatives to the Proposed Project), as an alternative rejected as being infeasible.

Response to Comment PC-26

Ms. Roberts states that there are several alternative sites that need to be considered.

The project alternative described by the commenter is considered in the DEIR, under Section VI (Alternatives to the Proposed Project), as an alternative rejected as being infeasible. The suggestion for DD residents to live at the Pillar Ridge manufactured home community is noted.

Response to Comment PC-27

Mr. Vespremi states that the visual representation is inaccurate.

This statement is introductory. No response is required by CEQA.*

Response to Comment PC-28

Mr. Vespremi narrates the images on slides supporting his accusation that the visual representation is inaccurate.

Refer to Topical Response 7, Visual Simulations, and Responses to Comment Letter 53.

Response to Comment PC-29

Mr. Vespremi states that the computer modeling he created using 3D modeling shows a much larger building than the image shown in the DEIR.

Refer to Topical Response 7, Visual Simulations and Response to Comment 53-3.

Response to Comment PC-30

Mr. Vespremi reiterates that the visual representation is inaccurate.

Refer to Topical Response 7, Visual Simulations and Responses to Comment Letter 53.

Response to Comment PC-31

Mr. Vespremi states that the possibility of obstructing views of the Bay from Highway 1 is present, contrary to what was stated in the DEIR.

Refer to Topical Response 7, Visual Simulations and Responses to Comment Letter 53.

Response to Comment PC-32

Mr. Vespremi states that the notification area needs to be increased to be more than 500 feet. Mr. Vespremi also asks the County to increase public comment period until February 2010 and insist that the story poles be put up.

The County requires a 300-foot notification radius for this project application. Regarding project noticing, refer to Response to Comment 49-1.

Regarding extension of the public comment period, refer to Topical Response 2, Public Review Period for the DEIR. Regarding story poles, refer to Topical Response 1, Story Poles.

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Response to Comment PC-33

Ms. Taylor speaks on behalf of the Chamber of Commerce and states that an economic survey done several years ago showed a need for office space on the Coast.

This statement is introductory. No response is required by CEQA.*

Response to Comment PC-34

Ms. Taylor states that it is important to put jobs in close proximity to already established housing and that the proposed project has a significant net benefit to the community and environment.

Refer to Section IV.K (Population and Housing) of the DEIR.

Response to Comment PC-35

Mr. Passen speaks on behalf of the California Department of Rehabilitation and states that the proposed project is consistent with the mission statement of the Department of Rehabilitation in regard to finding jobs for adults with disabilities.

Comment is noted.*

Response to Comment PC-36

Ms. McCaffrey states that with California unemployment rate being at 11% she is in full support of projects that would increase employment opportunities.

Refer to Section IV.K (Population and Housing) of the DEIR.

Response to Comment PC-37

Mr. Deman states that there are negative aspects associated with every project and that on a net basis the pros out weight the cons for the proposed project.

Comment is noted.*

Response to Comment PC-38

Ms. Burke states that the Big Wave parcels were deliberately designed for development by the County.

Comment is noted.*

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Response to Comment PC-39

Mr. Moroney states that the sewer and utilities portion of the DEIR is an inadequate analysis and more time is needed to overcome the inconsistencies in the analysis and the DEIR should be re-circulated accordingly.

Refer to Responses to Comment Letter 209.

Response to Comment PC-40

Mr. Moroney asserts that the sanitary district is the responsible agency for this project because they have permitting authority over the sewer connection.

This comment references prior comment letters that have been submitted on the proposed project and asserts that the Granada Sanitary District (GSD) is a responsible agency. Refer to Response to Comment 209-1.

Response to Comment PC-41

Mr. Moroney asserts that there are a number of inconsistencies and gaps contained in the DEIR.

Refer to Responses to Comment Letter 209.

Response to Comment PC-42

Mr. Off states his support and general appreciation for the proposed project.

Comment is noted.*

Response to Comment PC-43

Mr. Casteneo states his support and general appreciation for the proposed project.

Comment is noted.* Regarding tsunamis, refer to Topical Response 9, Tsunami Hazards.

Response to Comment PC-44

Ms. Winnen states her support for the proposed project.

Comment is noted.*

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Response to Comment PC-45

Ms. Patridge states her support and general appreciation for the proposed project, especially the Wellness Center.

Comment is noted.*

Response to Comment PC-46

Mr. Worden states that there is a severe jobs/housing imbalance on the Coast and states his support and general appreciation for the proposed project.

Refer to Section IV.K (Population and Housing) of the DEIR.

Response to Comment PC-47

Mr. Perkovic states that he is speaking on behalf of the Montara Water and Sanitary District, not as individual, asserts that the analysis contained in the DEIR regarding the water supply is inaccurate, and states that the applicant, County and consultant have failed to confer with responsible utility agencies.

Refer to Responses to Comments 101-1 through 101-8.

Response to Comment PC-48

Mr. Yoshimine states his support for the proposed project.

Comment is noted.*

Response to Comment PC-49

Mr. Johnson states his support and general appreciation for the proposed project offering affordable housing.

Comment is noted.*

Response to Comment PC-50

Mr. Beuerman states that there is a severe jobs/housing imbalance on the Coast and states his support and general appreciation for the proposed project

Comment is noted.*

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Response to Comment PC-51

Karen Holmes asserts that the project will benefit the Coastside community as a whole.

Comment is noted.*

Response to Comment PC-52

Jon Yoshimine states his support for the developer and project.

Comment is noted.*

Response to Comment PC-53

Marina Fraser asserts that the Office Park will provide much needed office space on the Coast.

Comment is noted.*

Response to Comment PC-54

Ruth Sowle asserts that the Coastside needs affordable housing and work opportunities for DD adults.

Comment is noted.*

Response to Comment PC-55

Aimee Luthringer states that the project will take 20 years to build and occupy. The commenter also states that the developer might use the permits and entitlements to sell the land to someone else.

These comments are similar to the comments provided in Comment Letter 72. Refer to Response to Comments 72-1, 72-2, and 72-4. In regard to phasing, refer to Topical Response 12, Construction Phasing for the Office Park.

Response to Comment PC-56

Pam Sayles expresses her support for the project.

Comment is noted.*

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Response to Comment PC-57

Neil Merrilees states that the scale of the Office Park is too large and does not fit the description of a light manufacturing or R&D complex. He also states that the DEIR does not properly analyze traffic impacts.

Refer to Response to Comments 81-2 and 81-3. Additionally, please reference Topical Response 12, Construction Phasing for the Office Park, and Section II of the FEIR, which includes a description of modified Alternative C. In regard to traffic impacts, refer to Topical Response 8, Traffic and Parking Impacts.

Response to Comment PC-58

Mary Larenas states that the Office Park has no guarantee for success, and therefore, the Wellness Center should not rely on its support. The commenter also states that the project will promote isolation.

While the Wellness Center relies on revenues from the Office Park to provide affordable housing units to the lowest income population (e.g., those below the poverty line), revenues from the Office Park are not required to sustain the Wellness Center. Regarding potential isolation of Wellness Center residents, refer to Response to Comment 21-1B.

Response to Comment PC-59

Iris Rogers states that the project would result in blocking views of Pillar Ridge from the mobile home community to the north of the project site and requests story poles to analyze the visual impacts.

These comments are similar to the comments provided in Comment Letter 172. Refer to Response to Comments 172-1 and 172-2.

Response to Comment PC-60

Dorothy Norris gives background information regarding the red-legged frog and states that the wetlands buffer zone does not adequately protect the species.

These comments are similar to the comments provided in Comment Letter 218. Refer to Response to Comments 218-1 through 218-7.

Response to Comment PC-61

Dorothy Norris asks the County supervisors to thoroughly examine the DEIR and claims that it provides alternatives for humans, but not frogs.

Refer to Response to Comment PC-60, above.

Response to Comment PC-62

David Vespremi provides an introduction and states that a PEIR best suits the project.

As provided by CEQA Guidelines Section 15168, a Program EIR is used to evaluate a series of actions that, because of their geographical proximity or their being related as logical parts in a chain of contemplated actions, can be characterized as one large project with respect to their environmental implications. However, the proposed project does not propose a series of separate actions, but a development consisting of a number of components that will be developed across both parcels. While the timing of the construction of project components may be simultaneous or phased depending on economic factors, as described in Topical Response 12, Construction Phasing for the Office Park, the phased development of construction, should it be the case, would not render the singular project into multiple distinct actions. Therefore, the Project EIR prepared for project is the appropriate documentation. The commenter introduces ensuing comments, which are addressed in Response to Comments 63 through 65, below.

Response to Comment PC-63

The commenter states the need for a construction development scheme as required by the zoning code.

Project phasing is described in Topical Response 12, Construction Phasing for the Office Park. However, this does not include an estimate of the vacancy rate for Coastside businesses, as requested by the commenter. An economic study of the project area is outside of the purview of CEQA. For more information, refer to Response to Comment 72-1.

Response to Comment PC-64

The commenter states that the Wellness Center does not fit the description of a sanitarium, and therefore, does not conform to zoning regulations.

Refer to Topical Response 11, Sanitarium, in addition to Impact LU-2 of Section IV.I (Land Use and Planning) of the DEIR.

Response to Comment PC-65

The commenter states that the Office Park does not conform to M-1 zoning.

Refer to Response to Comment PC-64, above.

Response to Comment PC-66

William Botieff states his support for the project based on its unique characteristics and privately sponsored growth.

Comment is noted.*

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Response to Comment PC-67

Debby Lesser states that the Lanterman Act requires affordable housing for the developmentally disabled. She expresses her support for the project.

Comment is noted.*

Response to Comment PC-68

Lisa Hutar expresses her support for the project because it is a privately funded project that will provide her disabled son with independent housing.

Comment is noted.*

Response to Comment PC-69

Barbara Kossy states that the project site is the wrong location for the project and suggests the Oceana development or Pacifica. Ms. Kossy states that a 10-foot wide corridor for wildlife is not enough and that the corridor should be at least 400 meters. The commenter also states that the project should not be considered a green development, as reuse of existing building(s) is more green than the construction of new buildings.

Regarding potential project impact to wildlife corridor(s), refer to Impact BIO-4a of the DEIR. In regard to whether the proposal is a green development, as proposed, the project will be LEED Platinum certified. In regard to alternative locations, refer to Section IV (Alternatives to the Proposed Project of the DEIR) in addition to Topical Response 5, Alternatives to the Proposed Project.

Response to Comment PC-70

Connie Fortino states that the project does not isolate the residents.

Comment is noted.*

Response to Comment PC-71

Michal Settles states that she supports the project because the community needs innovative and affordable housing for the developmentally disabled.

Comment is noted.*

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Response to Comment PC-72

James Larimer states that the project is within the sphere of CCWD and that they are willing to provide their services. He also asserts that the project will bring in much needed tax dollars.

Comment is noted.* Also, refer to Section IV.N.2 (Water) of the DEIR.

Response to Comment PC-73

Jennifer Gainza expresses her support for the project.

Comment is noted.*

Response to Comment PC-74

Terry McKinney states that projects like Big Wave are hard to find and that the local community needs an affordable housing development like the proposed project.

Comment is noted.*

Response to Comment PC-75

Terry Gosset states that the project is an innovative model for environmental design and that the DEIR shows it will have no significant impacts on the environment.

Comment is noted.*

Response to Comment PC-76

Barry Benda states that he supports the project because it provides desperately needed affordable housing and work opportunities.

Comment is noted.*

Response to Comment PC-77

Ellen James states that the project will use 381,030 kilowatt hours per month and 969,607 cubic feet per month of natural gas. The commenter also states that the project seeks to save money, not the environment, by using a 600 kilowatt natural gas burning generator to achieve peak load savings.

Refer to Response to Comment 194-2.

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Response to Comment PC-78

The commenter questions where the water that runs the turbine comes from. The commenter also questions the amount of emissions that would result from burning the natural gas.

Regarding natural gas emissions, refer to Response to Comment 194-2. No steam or water would be required for the operation of wind turbines, which generates electricity from natural wind power.

Response to Comment PC-79

Jamie Barber states that the opposition should not revert to slandering.

Comment is noted.*

Response to Comment PC-80

Devon Yoshimine states his support for the project.

Comment is noted.*

Response to Comment PC-81

Zack Peck states that the project provides the community with economic, environmental, and social benefits.

Comment is noted.*

Response to Comment PC-82

Zack Peck finishes his statement.

Comment is noted.*

Response to Comment PC-83

Teri Chatfield expresses her support for the project and the need for a local housing community for the developmentally disabled.

Comment is noted.*

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Response to Comment 84

Mary Lou Williams expresses the need for DD housing on the Coast.

Comment is noted.*

Response to Comment PC-85

Emmy Gainza expresses her desire to live at the Wellness Center.

Comment is noted.*

Response to Comment PC-86

Claudia Frank states that the Coast needs affordable housing for the developmentally disabled.

Comment is noted.*

Response to Comment PC-87

Patrick Winnen expresses his support for the project.

Comment is noted.*

Response to Comment PC-88

Carlysle Ann Young states that most coastal residents do not know about the proposed scale of the project due to the little notice provided.

Regarding project noticing, refer to Response to Comment 49-1.

Response to Comment PC-89

Carlysle Ann Young states that the DEIR does not adequately analyze traffic impacts to the intersection at Cypress Avenue and Cabrillo Highway. The commenter also states that traffic mitigation (e.g., installation of a traffic signal) should be implemented in the pre-construction period to mitigate the impacts of construction traffic.

As described in Topical Response 8, Traffic and Parking Impacts, Mitigation Measure TRANS-1 has been revised in the FEIR to address concerns expressed by the public regarding the congestion of the existing road network from project traffic and concerns regarding the timing of the installation of a traffic signal at Cypress Avenue and Highway 1. Mitigation Measure TRANS-1 has been revised to require a

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new traffic report to be submitted upon occupancy of every 60,000 sq. ft. of office space, until full project occupancy, and to require traffic reports to be submitted bi-annually after full project occupancy. Also, the revised mitigation measure addresses traffic conditions at the Highway 1 and Cypress Avenue intersection, along with the following additional intersections to evaluate if they maintain a LOS level "C" or better: Airport Street and Stanford/Cornell (Study Intersection 3 of DEIR), Broadway and Prospect Way (Study Intersection 2), Prospect Way and Capistrano (Study Intersection 1), and State Route 1 and Capistrano (Study Intersection 8). The revised mitigation measure shortens the timeframe for the implementation of the recommendations of the traffic report, including signal installation, from 5 years to 1 year of the date of the report.

Response to Comment PC-90

Carlysle Ann Young states that the project is unsafe because it lies within an earthquake and tsunami zone and adds that cars parking in the 640-space parking lot may be tossed onto Airport Street by tsunami waves and block emergency access.

Regarding potential exposure of people to tsunami hazards and emergency access routes, refer to Impact HYDRO-9 and Impact TRANS-4 of the DEIR, respectively. Regarding details of project earthquake and tsunami evacuation, refer to Topical Response 9, Tsunami Hazards. Regarding geologic hazards, refer to Section IV.F (Geology and Soils) of the DEIR.

Response to Comment PC-91

The commenter does not agree with the project location.

Comment is noted.*

Response to Comment PC-92

Len Erickson states that the project's visual simulations in the DEIR are inaccurate. He states that accurate visual simulations are necessary to assess visual and light impacts.

Refer to Topical Response 1, Story Poles, and Topical Response 7, Visual Simulations of the Proposed Project. It should be noted that the visual simulations were not prepared by the developer, but by Christopher A. Joseph and Associates, the environmental consultant retained by the County for this project. Light impacts are addressed in Impact AES-4 of the DEIR.

Response to Comment PC-93

John Lynch states that the project site does not have a proven source of water.

* *The comment does not identify a significant environmental issue for which CEQA requires a response by the Lead Agency. Refer to Topical Response 3, Standards for Responses to Comments and Focus of Review of Commenters. The comment is noted for the record and is included in the FEIR for the consideration of decision-making bodies in reviewing the project.*

These comments are similar to the comments provided in Comment Letter 55. Refer to Response to Comment 55-1.

Response to Comment PC-94

Molly Rice states her concern over traffic impacts. The commenter also questions the viability of filling the Office Park.

In regard to project traffic impacts, refer to Section IV.M (Transportation/Traffic) of the DEIR in addition to Topical Response 8, Traffic and Parking Impacts. The economic viability of the project is outside of the purview of CEQA. For more information, refer to Response to Comment 72-1.

Response to Comment PC-95

Kerrie DeMartini expresses her support for the project.

Comment is noted.*

Response to Comment PC-96

Robin Rourke expresses his support for the project.

Comment is noted.*

Response to Comment PC-97

Lee Fernandez states her concern regarding the small number of dwelling units available at the Wellness Center for the DD community.

Comment is noted.* Also, refer to Section IV.K (Population and Housing) of the DEIR.

Response to Comment PC-98

Leonard Woren states that Granada Sanitary District has sewage authority over the project site, not the Montara Water and Sanitary District (MWSD). He also states that he has struggled to obtain printed copies of the DEIR. He also implies that the wastewater options in the DEIR are confusing and that proposed disposal of excess stormwater to the sewer system is not allowed under GSD ordinance code.

Wastewater options, including project connection to GSD, are clarified in Section III.A of the FEIR. The project does not propose to dispose of stormwater through the sewer system. Also, refer to Response to Comment 209-1 and Section IV.N (Utilities and Service Systems) of the DEIR. As described in Topical

* *The comment does not identify a significant environmental issue for which CEQA requires a response by the Lead Agency. Refer to Topical Response 3, Standards for Responses to Comments and Focus of Review of Commenters. The comment is noted for the record and is included in the FEIR for the consideration of decision-making bodies in reviewing the project.*

Response 2, Public Review Period for the DEIR, the DEIR was available at the County's website for the full duration of the public review period.

Response to Comment PC-99

Merrill Bobele states that Big Wave is not the only model for DD residential services and work.

Comment is noted.*

Response to Comment PC-100

The commenter states that other governmental and non-governmental organizations that work with the developmentally disabled have not vetted the project.

The review of the proposed project by governmental and non-governmental organizations that work with the developmentally disabled is outside of the purview of CEQA. Comment is noted.*

* *The comment does not identify a significant environmental issue for which CEQA requires a response by the Lead Agency. Refer to Topical Response 3, Standards for Responses to Comments and Focus of Review of Commenters. The comment is noted for the record and is included in the FEIR for the consideration of decision-making bodies in reviewing the project.*

D. TOPICAL RESPONSES

Certain topics were raised more than once, albeit in slightly different terms, in comments on the DEIR from multiple commenters. In order to minimize repetition and to provide a more comprehensive discussion, "Topical Responses" have been prepared to address some of these recurring comments, and responses to individual comments reference topical responses, as appropriate. The topical responses are intended to provide a response to comments on the same recurring subject. A particular topical response may provide more information than needed to address any individual comment. Further, if a topical response does not comprehensively address a given comment, information in addition to that in the topical response will be provided in the individual response to that comment.

The Topical Responses in this FEIR address the following issues and are numbered as set forth below:

1. Story Poles
2. Public Review Period for the DEIR
3. Standards for Responses to Comments and Focus of Review of Commenters
4. Deferral of Mitigation Measures
5. Alternatives to the Proposed Project
6. Recirculation of the DEIR
7. Visual Simulations of the Proposed Project
8. Traffic and Parking Impacts
9. Tsunami Hazards
10. Final Geotechnical Report
11. Sanitarium Use Permit
12. Construction Phasing for the Office Park
13. County Permit History
14. Location of Project Near the Half Moon Bay Airport
15. Project Potable and Recycled Water Demand

TOPICAL RESPONSE 1: STORY POLES

Generally, public comments regarding story poles include requests that the applicant be required to erect story poles at the site and maintain the poles for the duration of the public comment period and raise questions about the County's requirement for story poles. Many comments challenge the accuracy of computer-generated simulations contained in the DEIR, and assert that story poles are needed to provide an accurate depiction of the project's visual impacts.

The County requested that the applicant erect story poles for the duration of the DEIR public review period. The applicant declined, but has stated that story poles will be installed and maintained during the public notification period prior to any County public hearing considering the project and the certification of the FEIR. The public notification period is 10 days prior to a public hearing date.

Detailed computer generated visual simulations prepared by Christopher A. Joseph and Associates (the environmental consultant the County retained for the preparation of the DEIR for the project) are included on pages IV.A-2, A-6 through A-8 of the DEIR. These simulations are based on true to scale AutoCAD maps integrated with photographs taken at map scaled locations. The visual simulations, along with other information in the DEIR and FEIR, afford a sufficient basis for assessing the aesthetic impacts of the project. As concluded on page IV.A-30, with the implementation of mitigation measures set forth in the DEIR and FEIR, the impact of the project on visual character and scenic resources would be less than significant. For additional information regarding the visual simulations in the DEIR, reference Topical Response 7, Visual Simulations of the Proposed Project.

Notwithstanding the foregoing, the applicant has agreed to install story poles for all Wellness Center buildings and for one of the Office Park buildings. The story poles will illustrate the vertical scale and stakes and flags will illustrate the horizontal scale. The story poles will represent the absolute height of the buildings, including finished elevation of the building pads and rooftop equipment (e.g., solar panels).

Further, it should be noted that neither the *CEQA Guidelines* nor the County Ordinance Code require the erection of story poles. As provided in Section 15151 of the *CEQA Guidelines*, "an evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible." Section IV.A (Aesthetics) of the DEIR concludes that the project would have a less than significant impact based on an analysis that addresses a variety of considerations, including the regulatory setting, the visual character and quality of the site and its surroundings including public views and scenic vistas, and potential project impacts to scenic resources, including nighttime views, during and after project construction. Story poles are not required in for a sufficient analysis of potential impacts to aesthetic resources given the comprehensive visual analysis contained in Section IV.A of the DEIR.

In an analysis, which is not based solely on the height of the proposed buildings, Section IV.A (Aesthetics) of the DEIR concludes that the project would have a less than significant impact. The analysis addresses a variety of considerations, including a detailed review of the regulatory setting and potential project impacts to public views and scenic vistas, scenic resources in the area, visual character and quality of the site and its surroundings, glare and light impacts to nighttime views, and the aesthetic impacts related to project construction. In light of the extent of graphic (i.e., visual simulations) and narrative descriptions of potential project impact to aesthetic resources on-site and in the surrounding area as contained in Section IV.A of the DEIR, story poles left in place for the entirety of the public comment period are not required for a sufficient analysis of potential project impact to aesthetic resources.

TOPICAL RESPONSE 2: PUBLIC REVIEW PERIOD FOR THE DEIR

Generally, public comments regarding the public review period include requests to extend the initial 45-day public review period for several reasons, including problems with the distribution of Chapter IV.N (Utilities and Service Systems) in hard copies of the Draft EIR, that the comment period ran through the holiday season, the length of the document, and the limited number of hard copies available at the Half Moon Bay Library.

Section 15105 of the State *CEQA Guidelines* (Public Review Period for a Draft EIR or a Proposed Negative Declaration or Mitigated Negative Declaration) provides basic guidance regarding this issue and states the following:

(a) The public review period for a draft EIR shall not be less than 30 days nor should it be longer than 60 days except under unusual circumstances. When a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days, unless a shorter period, not less than 30 days, is approved by the State Clearinghouse.

As discussed in Section I (Introduction) of this FEIR, the DEIR for the proposed project was made available to various public agencies, citizen groups, and interested individuals for a 64-day public review period from October 22, 2009 through December 24, 2009. Initially, the public review period was October 22, 2009 to December 7, 2009. The DEIR was circulated to State agencies through the State Clearinghouse of the Governor's Office of Planning and Research. The Notice of Availability (NOA) of the Draft EIR was completed by the County in accordance with Section 15085 of the *CEQA Guidelines*, including publication of the NOA in the Half Moon Bay Review and San Mateo County Times, both newspapers of general circulation serving the area in which the project is located. Although not required by CEQA, the notice was also sent by mail to interested parties (those who had provided comments during the scoping period), responsible agencies, and adjacent properties, including all addresses at the Pillar Ridge Mobile Home Park. Copies of the DEIR were made available for review at the County of San Mateo Planning and Building Department and the Half Moon Bay Library, and an electronic link to the DEIR in ".pdf" format was posted on the County's website.[*]

On November 9, 2009, the County of San Mateo sent a revised NOA to the State Clearinghouse and others who were sent the original NOA stating that the public review period for the proposed project had been extended from 45 days to 64 days to allow more time for responsible agencies and interested members of the public to review the DEIR. This extended the public review period for the DEIR by 19 calendar days. In a memorandum dated November 17, 2009, the State Clearinghouse acknowledged and notified all reviewing agencies of the public review period extension.

The extension of the review period was partly intended to allow for thorough review of Section IV.N (Utilities and Service Systems), which was inadvertently excluded from the initial hard-copy distribution of the DEIR. Hard copies of Section IV.N of the DEIR were distributed on November 6, 2009. On this

[*] *The comment does not identify a significant environmental issue for which CEQA requires a response by the Lead Agency. Refer to Topical Response 3, Standards for Responses to Comments and Focus of Review of Commenters. The comment is noted for the record and is included in the FEIR for the consideration of decision-making bodies in reviewing the project.*

date, a copy of Section IV.N, in addition to an extra full-set copy of the DEIR, was made available at the Half Moon Bay Library, and an electronic copy of Section IV.N, which was made available for review as a stand alone document on the County's website from the start of the public review period, was inserted into the online compiled version of the DEIR.

As described above, the length of the public review period for the Big Wave Wellness Center and Office Park DEIR complies with the public review period requirements of Section 15105 of the State *CEQA Guidelines*.

TOPICAL RESPONSE 3: STANDARDS FOR RESPONSES TO COMMENTS AND FOCUS OF REVIEW OF COMMENTERS

Numerous public comments request additional analysis, mitigation measures, or revisions to the DEIR that are not provided in the FEIR for reasons identified in the response to individual comments. In some circumstances, these responses reference this topical response for a variety of reasons. Such circumstances include, but are not limited to, instances when comments: did not address a specific environmental concern; assert the potential for significant impacts, or request additional studies, without providing substantial evidence in support of such assertions and requests; request for additional studies regarding impacts that have been determined to be less than significant without providing sufficient justification; and present an expert opinion that is in disagreement with the analysis based on expert opinion contained in the DEIR.

These responses comply with Sections 15003 and 15204(a) of the *CEQA Guidelines*, as described below.

Section 15003 states:

> *(i) CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good faith effort at full disclosure. A court does not pass upon the correctness of an EIR's environmental conclusions, but only determines if the EIR is sufficient as an informational document (Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692).*
>
> *(j) CEQA requires that decisions be informed and balanced. It must not be subverted into an instrument for the oppression and delay of social, economic, or recreational development or advancement (Laurel Heights Improvement Assoc. v. Regents of U.C. (1993) 6 Cal.4th 1112 and Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553).*

Section 15204(a) states:

> *In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or*

> *mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.*

Sections 15003 and 15204(a) reflect judicial interpretation of CEQA. Reviewers are encouraged to focus on the sufficiency of the environmental document's analysis, mitigation measures, and project alternatives. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. CEQA requires that lead agencies need only respond to significant environmental issues, and do not need to provide all information requested by reviewers, so long as a good faith effort at full disclosure is made in the EIR.

Under CEQA, the decision as to whether an environmental effect should be considered significant is reserved to the discretion of the lead agency based on substantial evidence in the record as a whole. The analysis of this EIR is based on the scientific and factual data reviewed by the County and reflects its independent judgment and conclusions. CEQA permits disagreements of opinion with respect to environmental issues addressed in an EIR without the EIR being deemed inadequate. As Section 15151 of the *CEQA Guidelines* states, even "[d]isagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts." With regard to comments that assert potential impacts should be considered significant, Section 21080(e) of CEQA defines the type of evidence required to support a conclusion of significant effect on the environment. It provides that:

> *(1) For the purposes of this section and this division, substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.*
>
> *(2) Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment.*

In addition, Section 15204(c) of CEQA advises reviewers that comments should be accompanied by factual support:

> *Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence.*

Finally, various comments request that the EIR analyze the potential impacts of scenarios that require significant speculation. CEQA does not require such speculative analysis. *CEQA Guidelines* Section 15145 provides that:

> *If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.*

TOPICAL RESPONSE 4: DEFERRAL OF MITIGATION MEASURES

Generally, public comments regarding the alleged deferral of mitigation include requests to revise or recirculate the Draft EIR to provide additional technical details or the results of additional studies necessary to determine the extent of project impacts. Commenters assert that the DEIR defers important project details and studies into the future and that without such information it is difficult to assess impacts and develop appropriate mitigation.

The following excerpts from the *CEQA Guidelines* provide helpful guidance with respect to such comments:

Section 15147 (Technical Detail): *The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public.*

Section 15126.4(a)(1) (Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects): *An EIR shall describe feasible measures which could minimize significant adverse impacts.*

The following subsections provide applicable guidance:

> *(b) Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way. …*
>
> *(d) If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed.*

Section 15370 (Mitigation): "Mitigation" includes:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) *Compensating for the impact by replacing or providing substitute resources or environments.*

While, by definition, mitigation may require that changes be made to the project proposed by an applicant for purposes of minimizing environmental impacts, the proposed mitigation measures of the DEIR do not alter the fundamental description of the project contained in Section III (Project Description) of the DEIR or the actual project analyzed. Consistent with CEQA's definition of mitigation, the DEIR relies on various approaches and measures designed to alleviate specific project-related impacts.

CEQA requires comprehensive environmental review at the earliest feasible stage in the planning process, and that mitigation be adequately identified in the EIR and not be deferred to the future. As noted above, CEQA does not require a project to mature to its precise final form before it is studied. As such, certain mitigation measures do require that future studies, investigations, and plans be prepared so that the extent of the mitigation required can be accurately and precisely determined once the specific project designs are presented to the County.

The following table describes how each required mitigation measure in the DEIR complies with the *CEQA Guidelines*:

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
AES-4: Prior to the approval of final project plans, a detailed lighting plan shall be submitted to San Mateo County for review and approval, consistent with its requirements.	The proposed lighting plan is described on page III-48 of the DEIR and incorporates many features to avoid substantial light and glare impacts to day and nighttime views (e.g., low height and low wattage, widely spaced, focused lighting). In addition, the mitigation measure applies performance standards (i.e., County lighting standards), as permitted by Section 15126.4(a)(1)(B) of the CEQA Guidelines, prior to the approval of project plans, thereby mitigating any potential significant effect of the project.
AQ-2: The applicant shall require the construction contractor to implement a dust control program.	The analysis acknowledges that dust may be generated from construction activities and minimizes the amount of dust in the air through dust control. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, this does not constitue deferred mitigation.
AQ-5: The project applicant shall provide supporting engineering calculations and site plan details to verify the basis of design for the odor removal system.	The proposed odor removal system is described on page IV.C-27 of the DEIR, where it states that the proposal incorporates many features to avoid the escape and spread of objectionable odors to neighboring areas. In addition, the mitigation measure applies performance standards (RWQCB requirements), as permitted by Section 15126.4(a)(1)(B) of the CEQA Guidelines, prior to the approval of the sewage treatment plant, thereby mitigating any

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
	potential significant effect of the project.
BIO-1a: A qualified biologist, capable of monitoring projects with potential habitat for Western pond turtles (WPT), San Francisco garter snakes (SFGS), and California red-legged frogs (CRLF) shall be present at the site to perform required duties (i.e., installation and removal of exclusion fencing).	The mitigation measure minimizes impacts to listed species by containing individuals and groups away from construction areas using exclusion fencing. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA **(**Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
BIO-1b: Any active bird nests in the vicinity of proposed grading shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own… If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from the nest are foraging independently and capable of independent survival at an earlier date.	The mitigation measure minimizes impacts to bird species by avoiding active bird nests or limiting their disturbance during implementation of the project. Avoiding the impact altogether by not taking a certain action or parts of an action and/or minimizing impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
BIO-1c: The applicant shall continue to coordinate all project activities potentially regulated by State, Federal, and local agencies and shall obtain all necessary permits from CDFG, Corps of Engineers, USFWS, and the RWQCB as required by Federal and State law to avoid, minimize or offset impacts to any species listed under either the State or Federal Endangered Species Acts or protected under any other State or Federal law.	This mitigation measure incorporates and applies performance standards (compliance with CDFG, Corps, USFWS, and the RWQCB permit requirements), as permitted by Section 15126.4(a)(1)(B), in order to address the project's potentially significant effects on special-status species.
BIO-1d: Sensitive and general habitat features outside the limits of approved grading and development shall be protected by identifying a construction and development boundary on all project plans and prohibiting construction equipment operation within this boundary.	The mitigation measure minimizes impacts to listed species by protecting habitat areas from construction activity using a construction and development boundary. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
BIO-4a: Requires additional provisions to be implemented to further protect wildlife habitat resources related to fencing, lighting, pets and food wastes.	The mitigation measure minimizes impacts to wildlife movement and habitat connectivity by applying performance standards related to fencing, lighting, pets and food wastes, as permitted by Section 15126.4(a)(1)(B), thereby mitigating any potential significant effect of the project.

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
CULT-2a: To avoid impacts to CA-SMA-151, the archaeological site shall be excluded from disruption during project construction. If avoidance of site CA-SMA-151 is impractical or infeasible, a County-approved archaeologist shall be retained to conduct test excavations at the site to determine the integrity of its subsurface deposit and prepare a mitigation plan.	The mitigation measure minimizes impacts to the archaeological site by requiring avoidance of the site or minimization of impacts to the site through a mitigation plan. As described in Section III of this FEIR, the applicant has revised the Wellness Center site plan to avoid the site. Avoiding the impact altogether by not taking a certain action or parts of an action constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
CULT-2b: A qualified archaeologist, as determined by the County, and a Native American shall monitor future ground-disturbing activities in the monitoring area north of site CA-SMA-151.	The mitigation measure minimizes impacts to the archaeological site by requiring an archaeologist to monitor future ground-disturbing activities within the monitoring area. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
CULT-2c: In the event that additional subsurface archaeological resources are encountered during the course of grading and/or excavation, all development shall temporarily cease in these areas until the County Planning Department is contacted and agrees upon a qualified archaeologist to be brought onto the project site to properly assess the resources and make recommendations for their disposition.	The mitigation measure minimizes impacts to the archaeological resources by requiring construction activities to temporarily cease in the event that additional subsurface archaeological resources are encountered during the course of grading and/or excavation. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
CULT-3: A qualified paleontologist, as determined by the County, shall monitor future ground-disturbing activities in native soil both on-site and off-site as related to the project.	The mitigation measure minimizes impacts to the archaeological resources by requiring a paleontologist to monitor future ground-disturbing activities in native soil both on-site and off-site. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
GEO-3a: In summary, this mitigation measure recommends three methods of addressing potential impacts related to cyclic densification, as determined in the final geotechnical investigation report: (1) over-excavating and replacing loose sandy soil with compacted engineered fill; (2) applying deep soil compaction techniques, or (3) designing building foundations to accommodate total and differential ground settlement resulting from cyclic densification, post-liquefaction settlement, and consolidation ground settlement (if	As stated in Section IV.F (Geology and Soils) of the DEIR, Treadwell and Rollo reviewed available subsurface data and concluded that the proposed project, as proposed and mitigated, is feasible from a geotechnical standpoint. The recommendations of the final geotechnical investigation would not address project feasibility (which has already been determined), but provide performance standards relating to method and design to address the potential impact. Compliance with performance standards prior to the approval of project plans would minimize any potential significant effect related to cyclic densification. *CEQA Guidelines* Section 15126.4.a.1 (Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects) states that while formulation of mitigation measures should not be deferred

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
applicable).	until some future time, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.
GEO-3b: In summary, this mitigation measure recommends four methods of addressing the potential for soil liquefaction and liquefaction-induced ground failures (such as lateral spreading, post-liquefaction reconsolidation, lurch cracking, and sand boils), after subsurface conditions have been better characterized: (1) improving the soil with deep soil compaction techniques, (2) use of stiffened shallow building foundations (i.e., footings with interlocking grade beams) bearing on a layer of well compacted fill; (3) use of deep building foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles); and (4) constructing a structural slab that spans supported between columns.	The recommendations of the final geotechnical investigation would not address project feasibility (which has already been determined), but provide performance standards relating to method and design to address the potential impact. Compliance with performance standards prior to the approval of project plans would minimize any potential significant effect related to soil liquefaction and liquefaction-induced ground failures. *CEQA Guidelines* Section 15126.4.a.1 (Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects) states that while formulation of mitigation measures should not be deferred until some future time, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way. As described in Section III of the FEIR, the project has selected drilled piers with interlocking grade beams, as it is the most reliable of the recommended foundation types. For more information, please refer to Topical Response 4: Deferral of Mitigation Measures and Topical Response 10, Final Geotechnical Report.
GEO-4: In summary, this mitigation measure recommends four methods (identical to those of Mitigation Measure GEO-3b) addressing the potential for total and differential ground settlement, after subsurface conditions and soil properties have been better characterized.	The recommendations of the final geotechnical investigation would not address project feasibility (which has already been determined), but provide performance standards relating to method and design to address the potential impact. Compliance with performance standards prior to the approval of project plans would minimize any potential significant effect related to total and differential ground settlement. *CEQA Guidelines* Section 15126.4.a.1 (Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects) states that while formulation of mitigation measures should not be deferred until some future time, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way. As described in Section III of the FEIR, the project has selected drilled piers with interlocking grade beams, as it is the most reliable of the recommended foundation types. For more information, please refer to Topical Response 4: Deferral of Mitigation Measures and Topical Response 10, Final Geotechnical Report.
GEO-6: In summary, this mitigation measure recommends four methods of addressing the potential for expansive soils, after an estimate of differential movement has been determined: (1) use of shallow foundations as specified; (2) use of a deepened spread footing system as	The recommendations of the final geotechnical investigation would not address project feasibility (which has already been determined), but provide performance standards relating to method and design to address the potential impact. Compliance with performance standards prior to the approval of project plans would minimize any potential significant effect related to expansive soils. *CEQA Guidelines* Section 15126.4.a.1 (Consideration and Discus-

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
specified; (3) use of a stiffened foundation system as specified; or (4) use of a deep foundation system as specified.	sion of Mitigation Measures Proposed to Minimize Significant Effects) states that while formulation of mitigation measures should not be deferred until some future time, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way. As discussed in Section III of the FEIR, the project will utilize Item 4, a deep pier foundation.
GEO-7: In summary, this mitigation measure requires the pervious pavement system to allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations and recommends three design recommendations: 1) the collection and redirection of surface and subsurface water away from the proposed building foundations, 2) using permeable base material within pavement areas, or 3) installing subdrains to collect and redirect water from areas that could adversely impact building foundations and vehicular pavement to a suitable outlet.	As stated in Section IV.F (Geology and Soils) of the DEIR, Treadwell and Rollo reviewed available subsurface data and concluded that the proposed project, as proposed and mitigated, is feasible from a geotechnical standpoint. The recommendations of the final geotechnical investigation would not address project feasibility (which has already been determined), but provide performance standards relating to method and design to address the potential impact. Compliance with performance standards prior to the approval of project plans would minimize any potential significant effect related to drainage. *CEQA Guidelines* Section 15126.4.a.1 (Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects) states that while formulation of mitigation measures should not be deferred until some future time, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.
GEO-8: In summary, this mitigation measure requires the applicant's consultant (Registered Geotechnical Engineer and Registered Engineering Geologist) shall review and approve the final grading, drainage, and foundation plans and specifications. All mitigations and final design recommendations shall be reviewed and approved by the County prior to issuance of applicable permits and approval of the Final Map.	As with Mitigation Measure GEO-7, compliance with typical standards prior to the approval of project plans would minimize any potential significant effect related to drainage. Compliance with County performance standards, such as the County's Drainage Policy and NPDES requirements, would mitigate any potential significant effect of the project. *CEQA Guidelines* Section 15126.4.a.1 (Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects) states that while formulation of mitigation measures should not be deferred until some future time, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.
HAZ-2: Prior to approval of final development plans, a Phase II Environmental Site Assessment (Phase II ESA) shall be performed at the project site to evaluate whether the recognized environmental conditions identified in the Phase I ESA represent an actual release of hazardous substances to soil or groundwater at the project site.	As stated within section Impact HAZ-2 of the DEIR, the environmental site condition identified by the Phase I study generally does not represent a threat to human health or the environment and generally would not be the subject of an enforcement action. Therefore, this does not qualify as a recognized environmental condition, the impact is less than significant, and no mitigation measures are required. The Phase II ESA is only a recommendation and compliance is not required in order to mitigate any potential significant effect of the project within the meaning of CEQA.
HAZ-3: Prior to approval of final development plans, an avigation easement shall be	The mitigation measure requires the creation of an avigation easement for the purpose of informing future residents that the

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
established for the project site, to the satisfaction of the County Director of Public Works. The avigation easement shall be recorded and shown on the vesting tentative map. With approval of the Wellness Center, the Wellness Center property owner(s) and tenants, and their successor's in interest in perpetuity, acknowledge the project's location adjacent to an airport and the noise level inherent in the use. A statement, as specified in the full mitigation measure, shall be included in the details of the avigation easement on the recorded Final Map, prior to the issuance of the Certificate of Occupancy for any residential unit at the subject property:	property is subject to noise and potential hazards. The mitigation measure has been formulated and would be implemented at the time of the Wellness Center parcel's creation.
HYDRO-3: "The applicant shall prepare and submit a SWPPP for the proposed project."	The mitigation measure minimizes the impacts of erosion and siltation to drainage patterns by requiring the preparation of a Stormwater Pollution Prevention Plan (SWPPP), subject to the requirements of the State's General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit), prior to issuance of a building permit. The mitigation measure applies performance standards (requirements of Construction General Permit for the SWPPP), thereby mitigating any potential significant effect of the project.
HYDRO-4: The applicant shall submit a drainage report and plans to the County that identify the drainage pathways and the extent of any off-site drainage that flows on-site.	The Grading, Drainage and Utility Plans are provided in Figures III-25 and III-26 of the DEIR. The mitigation measure minimizes impacts to drainage patterns by requiring the preparation of a drainage report and plan to the County. In doing so, the mitigation measure applies performance standards (required drainage plan compliance with County Drainage Policy and NPDES requirements), thereby mitigating any potential significant effect of the project.
HYDRO-5: The applicant shall prepare and submit a comprehensive erosion control plan and SWPPP.	The mitigation measure minimizes project runoff by requiring the preparation of a SWPPP. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
HYDRO-6: The applicant shall abandon all unused wells on the project site consistent with San Mateo County Department of Environmental Health standards and the standards described in the State of California Department of Water Resources Well Standards (Bulletins 74-81 and 74-90).	Section Impact HYDRO-6 of the DEIR states that, if any other wells do exist, are not used, and are not properly destroyed, the unused wells could pose a potentially significant impact to groundwater quality as pollutants entering the well would be rapidly conveyed to the subsurface aquifer. The abandonment of unused wells minimizes or eliminates pollutants entering the well. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action constitutes

Table II-1 **Discussion of Mitigation Measures of DEIR, as Revised by the FEIR**	
Mitigation Measure (Summarized)	**Compliance with CEQA Guidelines**
	appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
HYDRO-9: In areas subject to tsunami and seiche effects, implementing agencies shall, where appropriate, ensure that the project incorporates features designed to minimize damage from a tsunami or seiche.	The mitigation measure minimizes tsunami and seiche effects to the project by requiring compliance with performance standards (required tsunami or seiche design features, as determined by the implementing agency), as permitted by Section 15126.4(a)(1)(B) of the CEQA Guidelines, thereby mitigating any potential significant effect of the project.
NOISE-1: The construction contractor shall implement measures to reduce the noise levels generated by construction equipment operating at the project site during project grading and construction phases.	The mitigation measure minimizes noise levels generated by construction equipment operating at the project site during project grading by requiring implementation of performance standards (noise reduction measures), as permitted by Section 15126.4(a)(1)(B), thereby mitigating any potential significant effect of the project.
PS-1: Provide on-site manned security with clear lines of communication to fire and emergency medical response.	As discussed in section Impact PS-2 of the DEIR, although project impacts to police services were found to be less than significant, the mitigation measure is recommended by the Sheriff's Department to further reduce impacts related to an increased demand for police services associated with the proposed project. Implementation of the mitigation measure is not required in order to mitigate any potential significant effect of the project but is recommended.

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
TRANS-1: The property owner shall submit a traffic report to the Community Development Director, at full occupancy of every 60,000 sq. ft. of office space, until full project occupancy, and submit traffic reports bi-annually after full project occupancy. The report shall prepared by a Professional Transportation Engineer in the State of California and identify the Level of Service (LOS) at the intersection of Cypress Avenue and SR 1, Airport Street & Stanford/Cornell, Broadway & Prospect Way, Prospect Way & Capistrano Road and State Route 1 & Capistrano Road to evaluate if they maintain a LOS C or better. If LOS falls below existing worst-case levels for this intersection (LOS C in the AM and LOS D in the PM), the applicant shall coordinate with Caltrans to pay a fair share for the installation of a signal as necessary to ensure that the signal will be installed within 1 year of the date of that report. If traffic reports reveal that the LOS of any of the other intersections listed above fall below LOS C, it shall identify methods for reducing vehicle trips to and from the project site, as well as other roadway or intersection improvements that would result in LOS C or better. The applicant shall implement the measures required by the County, subject to all necessary permitting and environmental review requirements, within 1 year of the date of that report. In the event that permits required for roadway or intersection improvements are not obtained, the methods for maintaining LOS C or better shall be achieved by reducing vehicle trips to and from the project site.	Due to the demand-based phasing of Office Park construction and the proposed and required project traffic impact reduction measures, it is speculative at this time whether traffic from the Office Park will reach a critical volume that would result in a significant impact on local streets. However, it is clear that once intersection LOS exceeds level "C" at any of the study intersections, traffic impacts can be mitigated (i.e., installation of a signal, construction of designated turn lanes) as per the recommendation of a traffic report. Implementation of such mitigation measures would restore LOS at the affected intersection such that it returns to a level "C" or better. Offsetting the impact by repairing, rehabilitating, or restoring the impacted environment constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
TRANS-8: Prior to issuance of grading permits, the applicant shall also submit a traffic control plan to the County Department of Public Works for review and approval. All staging during construction shall occur on-site.	The mitigation measure minimizes traffic impacts to area streets from project construction by requiring compliance with performance standards (traffic control plan, as approved by the County Department of Public Works), as permitted by Section 15126.4(a)(1)(B), thereby mitigating any potential significant effect of the project.
UTIL-2: The applicant shall either: (a) revise the project design to limit the maximum amount of sewage flow to the	As described in Section III of the FEIR, the project incorporates flow equalization and water recycling such that the maximum amount of project sewage flow to the Granada Sanitary District

Table II-1
Discussion of Mitigation Measures of DEIR, as Revised by the FEIR

Mitigation Measure (Summarized)	Compliance with CEQA Guidelines
Granada Sanitary District sewer system to that which can be accommodated by the existing 8-inch sewer line in Stanford Avenue and the Princeton Pump Station; or (b) provide necessary expansion of the capacity of the sewer system to accommodate the addition of the expected maximum sewage flow of 26,000 gpd from the project.	sewer system could be accommodated by the existing 8-inch sewer line. Implementation of the mitigation measure minimizes impacts to the sewer system by maintaining a sewage flow that can be accommodated with the existing system. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.
UTIL-4: The applicant shall comply with State Health Department and RWQCB requirements for wastewater recycling.	The mitigation measure minimizes impacts resulting from the proposed wastewater facilities by requiring compliance with performance standards (State Health Department and RWQCB requirements for wastewater recycling), as permitted by Section 15126.4(a)(1)(B), thereby mitigating any potential significant effect of the project.
UTIL-5: The applicant shall revise the project plans and water budget analysis to correct the inconsistencies in the water recycling assumptions and calculations, and shall use this information to verify: (a) the adequacy of plans for irrigation uses of recycled water; and (b) the sufficiency of the proposed landscape areas for winter season dispersal of all wastewater flow not distributed for toilet flushing. The project's use of treated wastewater for irrigation shall be managed and controlled to prevent changes in existing drainage and hydrology that could adversely impact the biology or hydrology of wetland habitats or result in ponding that could result in health, circulation, or structural stability problems. Prior to Planning approval of any grading permit, the applicant shall submit a report, prepared by a biologist/hydrologist to determine appropriate recycled watering levels for all seasons that is consistent with the above requirement and the revised water budget analysis. The report shall be submitted for review by the Environmental Health Division, RWQCB, and the County Planning Department. Use of recycled water for irrigation shall be monitored for two years by a biologist/hydrologist to adjust water levels as necessary based on actual site conditions.	The mitigation measure minimizes impacts resulting from the proposed wastewater and recycling facilities by requiring compliance with performance standards (RWQCB requirements), as permitted by Section 15126.4(a)(1)(B), thereby mitigating any potential significant effect of the project.
UTIL-6: The project applicant shall modify the current plans for sewer	The mitigation measure minimizes impacts resulting from the proposed creek crossing by requiring compliance with

Table II-1 Discussion of Mitigation Measures of DEIR, as Revised by the FEIR	
Mitigation Measure (Summarized)	**Compliance with CEQA Guidelines**
connection between the North and South parcels to provide either: (a) realignment and profile correction to accommodate a gravity sewer line; or (b) incorporation of a lift station on either the North or South parcel.	performance standards (specified modifications to sewer plans), as permitted by Section 15126.4(a)(1)(B), thereby mitigating any potential significant effect of the project.
UTIL-11: To facilitate on-site separation and recycling of construction-related wastes, the contractor(s) shall provide temporary waste separation bins on-site during construction. The applicant shall prepare and submit a facility recycling program for the collection and loading of recyclable materials prepared in response to the California Solid Waste Reuse and Recycling Access Act of 1991 as described by the CIWMB, Model Ordinance.	Implementation of the mitigation measure (facilitation of on-site separation and recycling of construction-related wastes and a facility recycling program) minimizes project construction and operations wastes to that which can be accommodated by the landfill. Minimization of impacts by limiting the degree or magnitude of the action and its implementation constitutes appropriate "mitigation" under CEQA (Section 15370) and, therefore, there is no issue with respect to deferred mitigation.

Section 21081.6 of the Public Resources Code requires a lead agency to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment" (Mitigation Monitoring Program, Section 15097 of the State *CEQA Guidelines* provides additional direction on mitigation monitoring or reporting). The County of San Mateo is the lead agency for the proposed project and is therefore responsible for enforcing and monitoring the mitigation measures in the Mitigation Monitoring and Reporting Program. Enforcement of this Program, which is included in Section IV of Volume I of the FEIR, will ensure that mitigation measures are carried out in a manner and timeframe that complies with CEQA requirements.

TOPICAL RESPONSE 5: ALTERNATIVES TO THE PROPOSED PROJECT

Generally, public comments regarding the alternatives to the proposed project request the County to consider a described alternative or an alternative project location.

CEQA Guidelines require that EIRs include the identification and evaluation of a reasonable range of alternatives that are designed to reduce the significant environmental impacts of the project while still meeting the general project objectives. The following sections of the *CEQA Guidelines* apply to the identification and evaluation of alternatives:

Section 15126.6(a) sets forth the intent and extent of the alternatives analysis to be provided in an EIR:

> *An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but*

> *would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparable merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*

Section 15126.6(b) states:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.*

County's Selection of Alternatives

The County selected four alternatives to the proposed project for analysis in the DEIR that constitute a range of potentially feasible alternatives. As described and analyzed in Section III (Corrections and Additions to the Draft EIR), Alternative C in the DEIR has been revised (referred to as Modified Alternative C) to further reduce the aesthetic, biological, hydrological, and traffic impacts of this alternative. The final alternatives are listed below:

Table II-2
Final Alternatives for the Big Wave Wellness Center and Office Park Project

Alternative	Total Sq. Ft.	Stories	Number of Buildings	Total Building Footprint Compared to Project
Alternative A: No Project Alternative	N/A	N/A	N/A	N/A
Alternative B: Reduced Density/ Height for Office Park	186,000	2	4	20% increase
Modified Alternative C in the FEIR: Smaller, Staggered Height Office Park Buildings and Reduced Size for Wellness Center	225,000	Front Row (4 Bldgs): 2 Back Row (4 Bldgs): 3	8	15% increase (originally, 41% increase)
Alternative D: Modified Office Park Site Plan Alternative 2	200,000	3	3	16% decrease
Project (provided for reference)	225,000	3	4	N/A (approx. 80,000 sq. ft.)

As shown in the table above, notable differences among the alternatives involve changes to the Office Park proposal, including changes to the total building square footage, number of buildings, number of stories, and building footprint. Thorough descriptions of Alternatives A, B, C and D are provided in

Section VI (Alternatives to the Proposed Project) of the DEIR. Section VI of the DEIR also includes a detailed analysis of the potential environmental impacts of these alternatives. As stated previously, Modified Alternative C is described in Section III (Corrections and Additions to the Draft EIR) of this FEIR, which also includes a detailed analysis of the potential environmental impacts of this alternative.

Alternatives Considered to be Infeasible

The following sections of the State *CEQA Guidelines* apply to the identification of alternatives that were rejected as infeasible:

Section 15126.6(f)(1) states:

> *Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.*

Section 15126.6(c) states:

> *The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.*

Many of the commenters expressed support for a specific alternative involving development of the Wellness Center and Office Park on the northern parcel and restoration of wetlands on the southern parcel. As noted on page VI-5 of Section VI (Alternatives to the Proposed Project) of the DEIR, this reduced development alternative was rejected as being economically infeasible. Specifically, Big Wave, LLC is donating the Wellness Center site to the Big Wave non-profit organization, which allows for the non-profit organization to keep housing costs low by providing the Wellness Center with secure ownership of the Wellness Center site. As Big Wave, LLC, a separate owner from the Big Wave non-profit organization, owns the Office Park site and has not offered to donate of a portion of the Office Park site to the Big Wave non-profit organization, the Big Wave non-profit organization would have to purchase one-half of the developable portion of the Office Park site, which would ultimately result in the units at the Wellness Center being unaffordable for lower income developmentally disabled residents. It should also be noted that, as no restoration would occur on the southern parcel under this alternative, this alternative reduces the area of restored wetlands and the corresponding benefits of restoration. Per the Sections of the CEQA Guidelines cited above, an EIR is not required to consider alternatives which are not economically viable.

Also, many commenters suggested segregating the development of one of the project components, either the Wellness Center or the Office Park, with one project component to be constructed on the Coastside and the other on the Bayside area of San Mateo County. Variations of this alternative were rejected as infeasible as these alternatives would have required the spatial separation of the two project components, resulting in a conflict with an important project objective. As stated under "Organization, Programs, Employment Options" on page III-39 of the DEIR, the Wellness Center and Office Park are connected spatially in order to provide the developmentally disabled residents with employment opportunities, as well as to provide additional income flow from the Office Park to the Wellness Center through the provision of utilities based on the Wellness Center property: "The Wellness Center would offer its residents a variety of services, including job opportunities due to a number of business operations that would employ residents, and, in some cases, generate revenue to maintain the economic sustainability of the Wellness Center. This includes the proposed: BW Catering/Food Services; BW Energy; BW Farming; BW Water; BW Transportation; BW Recycling; BW Communications (Fiberlink); and BW Maintenance."

As discussed in detail in Section VI of the DEIR, other alternative locations were analyzed and rejected as infeasible, including six alternate sites for the Wellness Center: 1) Moss Beach Highlands Site (located on Etheldore Street; APN 037-320-270); 2) Etheldore Site (located between Highway 1 and Etheldore Street; APN 037-291-010); 3) Hospital Site No. 1 (South) (located on Etheldore Street; APN 037-160-110); 4) Hospital Site No. 2 (North) (located on Etheldore Street; APN 037-160-100); 5) Farallone Vista Site (located 400 feet east of Highway 1 with access from Carlos Street); and 6) North El Granada Site (located on Sevilla Avenue). These potential affordable housing sites have various environmental constraints and thus development of the Wellness Center at such sites would not reduce all of the significant impacts associated with the project and would create new significant impacts. Also, this type of alternative would not meet some of the project objectives, particularly the objective to locate the Wellness Center within walking/ wheelchair distance to the Office Park.

TOPICAL RESPONSE 6: RECIRCULATION OF THE DEIR

Section 15088.5(a) of the *CEQA Guidelines* provides direction for EIR recirculation prior to certification:

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043).

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

Clarifying information has been provided in Section III (Corrections and Additions to the Draft EIR) of the FEIR in order to 1) clarify or refine (provide additional detail) to the information in the DEIR, 2) to include additional mitigations proposed by the County, and 3) to provide a description on how the mitigations of the DEIR and additional mitigation from the County would be incorporated into the project. The following is a summary of key changes to the DEIR:

Table II-3
Summary of Key Changes to the DEIR and Analysis of Whether the Change Represents "New Significant Information"

What Changed:	Is this Considered "New Significant Information"?
Wellness Center Site	
The Wellness Center Project was reduced in size from 70 units to 57 units.	NO – Site plan was revised to reduce the size of the Wellness Center to avoid the archeological site in compliance with Mitigation Measure Cult-2 of the DEIR. This reduces, rather than increases, the severity of potential environmental impact.
The public storage use at the Wellness Center site has been relocated and reduced from 20,000 sq. ft. to 10,000 sq. ft.	NO – Change reduces traffic impacts and would not result in a significant aesthetic impact. This reduces, rather than increases, the severity of potential environmental impact.
The Community Center aspect has been removed.	NO – Change reduces traffic impacts.
First floor elevations of Wellness Center Buildings were raised from 18 feet to 20 feet NGVD.	NO – Change reduces impacts related to tsunami, flood and sea level rise hazards impacts and would not result in a significant aesthetic impact, as proposed building heights from natural grade would remain the same.
Modified landscaping plan to include a vegetative buffer of wetlands trees will be installed around the perimeter of the property and to provide additional habitat and visual and noise buffering.	NO – Change provides biological function to landscaping and does not result in new aesthetic or noise impacts.
The project will incorporate a foundation of drilled pier supported interlocking grade beams.	NO – Information provided to comply with Mitigation Measures GEO 1 through 8.

Table II-3
Summary of Key Changes to the DEIR and Analysis of Whether the Change Represents "New Significant Information"

What Changed:	Is this Considered "New Significant Information"?
Office Park Site	
Applicant proposes an off-site parking agreement and shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic.	NO – Use of an off-site area for parking would not result in additional significant environmental impacts as parking would already be an allowed use at the site.
Alternative C of the DEIR was modified.	NO – The alternative was further refined. The total square footage of Alternative C was retained, while aesthetic and biological/ hydrological impacts were reduced.
Utilities	
Clarification of Water System options: The FEIR clarifies that the water storage system for fire protection will rely one or the combination of the following sources: (1) the public water supply, (2) below building storage tank, and/or (3) Wellness Center swimming pool.	NO – In the DEIR, the proposed options for water systems were: (1) domestic hookups and one fire system hookup, and (2) use of well water/treatment systems. The FEIR maintains the option of fire system hookup and use of the swimming pool and adds the use of a below building storage tank. While an additional 500 c.y. of excavation would be required, overall grading has been reduced and would continue to be balanced[1]. Also, the tank would be located within a building footing on the Wellness Center parcel and would not increase the footprint or impermeability of the project. These details do not substantially increase the severity of identified environmental impacts.
Clarification of Wastewater System options: The FEIR clarifies that a total of 8 EDUs will be purchased for emergency and excess discharge into the Granada Sanitary District (GSD) system. The drainfields have been removed.	NO – In the DEIR, the proposed options for wastewater systems were: (1) use of an on-site wastewater treatment plant with disposal through irrigation and infiltration through three drainfields, and/or (2) municipal hookups. The FEIR refines the proposed options in the DEIR. The GSD connections would not increase impacts to the existing systems as the applicant would provide 24-hour on-site storage of influent and effluent for flow equalization to insure that the GSD system capacity will not be exceeded during normal operation and peak wet weather flows. Removal of the drainfields would reduce water quality and groundwater impacts.
Development of separate, small MBR plants (formally one plant on Wellness Center site).	NO – MBR plants were designed and relocated due to the requirements of Mitigation Measure CULT-2a. Capacity and function of MBR plant remains as described in the DEIR. MBR plants would be located within the proposed building footprints. As MBR Plants would be subject to RWQCB and CDPH regulations, redesigned MBR plants would not result in additional impacts.
Corrections	

[1] *See revised Grading Estimates in Revisions to the Project Description.*

Table II-3
Summary of Key Changes to the DEIR and Analysis of Whether the Change Represents "New Significant Information"

What Changed:	Is this Considered "New Significant Information"?
Coastal Development Permit from California Coastal Commission (CCC): A Coastal Development Permit (in addition to the CDP required from the County of San Mateo) would be required for those portions of the site that are within the jurisdiction of the CCC.	The DEIR stated that a CDP would be required from the County. For development within portions of the parcel that are within the jurisdiction of the CCC, a separate CDP would be required. The correction is described in the FEIR and a new recommended mitigation measure has been added. As the applicant would be subject to this requirement regardless of whether or not the permit requirement is contained in a mitigation measure in the DEIR, a *recommended* Mitigation Measure LU-2 has been added in the FEIR.
Correction to Zoning: Portions of the wetland and wetland buffer zones on the project sites are zoned Resource Management/Coastal Zone (RM-CZ), as shown in Figure II.D.a of the FEIR.	The DEIR stated that the zoning districts are applicable to the project sites. As the applicant would be subject to this requirement regardless of whether or not the RM zoning was identified in the DEIR, this information does not constitute new significant information.

An analysis of potential environmental impacts resulting from changes to the project description, including but not limited to those described above, are described in Section III.C (environmental Analysis) of the FEIR. It should be noted that edits have been made to mitigation measures in the DEIR, as shown in Section III.B (revisions to the Draft EIR) to enhance the intent, purpose and function of the original mitigation measure. As described above, none of the changes would result in the addition of significant new information to the EIR. The changes would not result in any new significant environmental impact, would not substantially increase the severity of an environmental impact that requires additional mitigation, does not include a feasible project alternative or mitigation measure that would clearly lessen the environmental impacts of the project that the project's proponents decline to adopt. As the FEIR merely clarifies or amplifies or makes insignificant modifications to an adequate Draft EIR, recirculation of the Draft EIR is not required.

TOPICAL RESPONSE 7: VISUAL SIMULATIONS OF THE PROPOSED PROJECT

Generally, public comments regarding the visual simulations of the proposed project provided in the DEIR questioned the methodology and accuracy of the simulations.

The visual simulations presented in Section IV.A (Aesthetics) of the DEIR, Figures IV.A-4 through IV.A-8 on pages IV.A-22 through IV.A-36, were prepared by Christopher A. Joseph and Associates (the environmental consultant retained by the County to prepare the DEIR for this project). The visual simulations show five representative views of the project as proposed. Viewpoint photographs were collected during the months of May and June of 2009 using two different cameras. Viewpoints 1 and 2 were photographed with a Panasonic DMC-FZ30 and Viewpoints 3 through 5 were photographed with a

Hewlett-Packard Photosmart M627. San Mateo County Planning staff helped choose representative viewpoints that would show the proposed project from a variety of viewpoints and distances.

Once the viewpoints were photographed, computer-generated models were created using design, landscaping, and site information from the project architect, and surrounding land data from various public agencies, including San Mateo County and the United States Geological Survey. Surveyed topographic data and proposed grading data of the site were used to create a very accurate model of the landform features within the site. USGS Digital-Elevation-Model (DEM) data was used to create landform features of the surrounding area, and County parcel data was projected onto the landform to finish the base upon which the proposed project model could be built. Other potential sources of topographic data, such as Google Earth, were determined to be too inaccurate for use in analysis. 3-D models and Computer-Aided-Design (CAD) drawings of the proposed project were combined, textured, and placed on the landform base. Parking lots, curbs, lights, and landscaping (trees, shrubs, etc.) were placed in according to the landscaping plan. With the model of the site, project and surrounding area complete, computer-generated (CG) cameras were created to match the 'real-world' cameras both in placement and imaging parameters such as field-of-view, aspect ratio, focal length, f-stop, etc. Placement of the CG cameras was determined by using a combination of field notes and photogrammetry (utilizing field of view and line of sight triangulation on existing elements in each image). Height of each CG camera was placed 5'6" above the local landform base. The CG cameras were used to recreate the views from the 'real-world' cameras and allow the two images to be blended in Photoshop to provide a realistic, representative view of the proposed project sitting in the existing landscape. This method provided greater accuracy than that which could be obtained through the use of Google Earth, as necessary to assess the aesthetic impacts described in Section IV.A-5.

TOPICAL RESPONSE 8: TRAFFIC AND PARKING IMPACTS

Generally, public comments regarding traffic and parking impacts of the proposed project include statements that: 1) the capacity of the existing road network and levels of service cannot accommodate the amount of traffic that would result from the project at full occupancy (particularly traffic associated with the Office Park), 2) Mitigation Measure TRANS-1 of the DEIR should be revised to require the signal at Cypress Avenue and Highway 1 to be installed prior to occupancy of the Office Park, 3) project traffic will negatively impact traffic conditions on Highways 1 and 92, and 4) granting of a Parking Exception will impact parking along Airport Street and public access to the coast.

Concerns Regarding Congestion of the Existing Road Network from Project Traffic and Concerns Regarding the Timing of the Installation of a Traffic Signal at Cypress Avenue and Highway 1

As stated in Impact TRANS-1 of the DEIR on page IV.M-27 and 28, with the project, the peak-hour signal warrant would be met at the intersection of Highway 1 at Cypress Avenue and impacts to intersection LOS and capacity would be significant (the signal warrant analysis sheets are included in Appendix J of this DEIR).[2] With signalization, this intersection would operate at LOS A under the AM

[2] *According to the County of San Mateo Level Of Service (LOS) guidelines, a development is said to create a significant adverse impact on traffic conditions at an intersection if, for either peak hour, the LOS at the intersection degrades from an*

and PM peak-hours for both (average and worst-case) project scenarios. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand.

The DEIR adds Mitigation Measure TRANS-1 to require, following project occupancy, a bi-annual report prepared by a Professional Transportation Engineer in the State of California, reporting on the level of service at the intersection of Cypress Avenue and Highway (SR) 1 and stating whether or not this location warrants a signal. If it meets warrants, then the applicant shall coordinate with CalTrans to pay a fair share for the installation of a signal, as necessary to ensure that the signal will be installed within 5 years of the date of that report. Implementation of the mitigation measure would reduce the impact related to project peak-hour traffic volumes and intersection LOS to a less than significant level.

Mitigation Measure TRANS-1 (Intersection Level of Service and Capacity) of the DEIR (Superseded): Following project occupancy, the applicant shall submit a bi-annual report, signed and stamped by a Professional Transportation Engineer in the State of California, to the Director of Planning and Building on the level of service at the intersection of Cypress Avenue and SR 1 stating whether or not this location warrants a signal. If it meets warrants, then the applicant shall coordinate with CalTrans to pay a fair share for the installation of a signal within 5 years of the date of that report.

Mitigation Measure TRANS-1 has been revised in the FEIR to address concerns expressed by the public regarding the congestion of the existing road network from project traffic and concerns regarding the timing of the installation of a traffic signal at Cypress Avenue and Highway 1. Mitigation Measure TRANS-1 has been revised, as shown below, to require a new traffic report to be submitted upon occupancy of every 60,000 sq. ft. of office space, until full project occupancy, and to require traffic reports to be submitted bi-annually after full project occupancy. Also, the revised mitigation measure addresses traffic conditions at the Highway 1 and Cypress Avenue intersection, along with the following additional intersections to evaluate if they maintain a LOS level "C" or better: Airport Street and Stanford/Cornell (Study Intersection 3 of DEIR), Broadway and Prospect Way (Study Intersection 2), Prospect Way and Capistrano (Study Intersection 1), and State Route 1 and Capistrano (Study Intersection 8). The revised mitigation measure shortens the timeframe for the implementation of the recommendations of the traffic report, including signal installation, from 5 years to 1 year of the date of the report.

Revised Mitigation Measure TRANS-1 of the FEIR: The property owner shall submit a traffic report to the Community Development Director, at full occupancy of every 60,000 sq. ft. of office space, until full project occupancy, and submit traffic reports bi-annually after full project occupancy. The report shall be signed and stamped by a Professional Transportation Engineer in the State of California and identify the Level of Service (LOS) at the intersection of Cypress Avenue and SR 1, Airport Street & Stanford/Cornell (Study Intersection 3 of DEIR), Broadway & Prospect Way (Study Intersection 2), Prospect Way & Capistrano (Study Intersection 1) and State Route 1 & Capistrano (Study Intersection 8) to evaluate if they maintain a LOS C or better. If Levels of Service fall below existing worst-case levels for this intersection (LOS C in the AM and LOS D in the PM), the applicant shall coordinate with Caltrans to pay a fair share for the installation of a signal as necessary to ensure that the signal will be

acceptable LOS D or better under baseline conditions to an unacceptable LOS E or F under project conditions. The eastbound left-turn movement at this intersection is shown to operate at LOS F with a delay of 59.8 seconds under Project Conditions, where under Background Conditions the intersection is shown to operate at LOS D.

installed within 1 year of the date of that report. If traffic reports reveal that the LOS of any of the other intersections listed above fall below LOS C, it shall identify methods for reducing vehicle trips to and from the project site, as well as other roadway or intersection improvements that would result in LOS C or better. The applicant shall implement the measures required by the Department of Public Works and the Planning and Building Department, subject to all necessary permitting and environmental review requirements, within 1 year of the date of that report. In the event that permits required for roadway or intersection improvements are not obtained, the methods for maintaining LOS C or better shall be achieved by reducing vehicle trips to and from the project site.

Also, as discussed in Section III (Corrections and Additions to the Draft EIR) of the FEIR, the applicant has made the following modifications to the project in order to further reduce traffic impacts to the area:

- The Community Center aspect has been removed, thereby restricting pool, fitness center, and locker facilities for use by Wellness Center residents, staff and their guests only. Initially, these facilities were available to the Coastside public.

- The public storage use at the Wellness Center site has been reduced from 20,000 sq. ft. to 10,000 sq. ft.

- Prior to occupancy of any Office Park building, the applicant proposes to implement Traffic Demand Management (TDM) measures, including an off-site parking agreement and shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic on Cypress Avenue, Prospect Way, Broadway to Cornell Avenue, Harvard Avenue, and Yale Avenue.

Concerns Regarding Negative Impacts to Traffic Conditions on Highways 1 and 92

Please refer to "Impact TRANS-11 Additional Intersection Analysis" on page IV.M-43 of the DEIR for an analysis of project traffic impacts on Highway 92 at Highway 1 and Highway 92 at Main Street. The section concludes with the following statement: "The proposed project would, in fact, reduce traffic traveling over the hill on Highway 92 for employment by 60 eastbound trips in the AM peak hour and 53 westbound trips in the PM peak hour. Impacts would be less than significant and no mitigation measures are required."[3]

[3] *Analysis and conclusions of Impact TRANS-1 are based on a memorandum prepared by Hexagon Transportation Consultants, dated September 23, 2009, included in Appendix J of the DEIR.*

Potential Impacts of Requested Parking Exception

Table IV.M-9 on page IV.M-39 of the DEIR represents a conservative interpretation of the County parking requirements for the mixed-use Office Park. The table below shows that, based on County parking requirements for office use (1 parking space for every 200 sq. ft.), a total of 737 parking spaces would be required. This represents the "upper limit" of the parking required by the County for the mixed-use Office Park. The DEIR states that the provision of 640 spaces where 737 are required would not result in a significant impact to parking in the area. Based on this calculation, the applicant requests a parking exception for 97 parking spaces.

County Parking Regulations do set different parking space requirements for "office" uses and "other uses permitted in the 'M' Zoning Districts," which requires the "lower limit" of the parking required by the County for the mixed-use Office Park, as shown in the table below.

Table II-4
Parking Requirements for Office Park

Proposed Use	Sq. Ft.	County Parking Regulations		Parking Spaces Required (using Total sq. ft. of "equivalent Office Space" from DEIR)[2]
		Parking Space Ratio	Parking Spaces Required under M-1 District	
General Office (40%)	90,000	1 sp/200 sq. ft.	450.00	450.00
Research and Development (25%)	56,250	1 sp/2,000 sq. ft.[1]	28.13	208.00
Light Manufacturing (20%)	45,000	1 sp/2,000 sq. ft.	22.50	79
Storage uses (15%)	33,750	1 sp/2,000 sq. ft.	16.88	0
	225,000		517.51	**737**
Lower Limit of Required Parking Spaces (County):				**518**
Upper Limit of Required Parking Spaces (DEIR)				**737**
Average of Above:				**628**
Total Proposed Parking Spaces				**640**

[1]The Parking Regulations require "1 space for each 2 employees on largest shift; in no case less than 1 space for each 2,000 sq. ft. of floor area" for all uses which are permitted in "M" Districts, but not specifically enumerated in the regulations.

Staff has concluded that the demand for parking at the site is likely to be in between 737 and 518 parking spaces, which averages at 628 parking spaces. As the applicant proposes 640 spaces, the on-site parking is not anticipated to impact street parking or public access. Based on the foregoing, including the proposed shuttle service that reduces the need for parking spaces, granting of a parking exception to allow 640 spaces where 737 would otherwise be called for under the regulations, the granting of a parking exception would not result in a significant impact to parking in the area.

Percentages of Approved Uses for the Office Park

Commenters stated that it will be difficult for the County to enforce the proposed percentages of mixed office use and that it is likely that office uses, the most parking intensive of the proposed uses, will exceed 40%.

The County's approval of this project or a project alternative would require that the project remain as approved, including retaining the percentages or total square footages of each proposed use. The approval will require regular review and monitoring of the project by the County, at the owner's expense, to ensure that the project is operated in a manner that is consistent with the County's approval. Office Park building construction will rely on economic demand for each particular use (i.e., office, research and development, light manufacturing, and/or storage use). However, in the event that less than the full approved square footage of the Office Park is built, the total square footages of each use cannot exceed the total area approved for that use. Each building constructed would be required to meet the parking requirements of the proposed use under that permit. Therefore, although a partially constructed Office Park would not retain the exact percentages as set forth in the DEIR, the extent of approved uses in the Office Park would remain consistent with the analysis in the DEIR.

TOPICAL RESPONSE 9: TSUNAMI HAZARDS

Generally, public comments regarding potential tsunami hazard at the project site include statements that the applicant should consider an alternative location for the Wellness Center, on the basis that it is inappropriate to provide housing for the developmentally disabled in a tsunami hazard area. Other comments offered informational resources regarding the design of structures within tsunami areas and evacuation methods and training.

a. Analysis of Tsunami and Seiche Hazards in the DEIR

As stated in Section IV.H (Hydrology and Water Quality) of the DEIR, the project would place residential and commercial structures within a mapped tsunami area. The potential for tsunami events could expose people to inundation by seiche, which represents a potentially significant impact. Mitigation Measure HYDRO-9 of the DEIR requires that, in areas subject to tsunami and seiche effects, structures would either be placed at elevations above those likely to be adversely affected during a tsunami or seiche event or be designed to allow swift water to flow around, through, or underneath the structures without causing collapse.

Mitigation Measure HYDRO-9 Exposure to Tsunami and Seiche: In areas subject to tsunami and seiche effects, implementing agencies shall, where appropriate, ensure that the project incorporates features designed to minimize damage from a tsunami or seiche. Structures should either be placed at elevations above those likely to be adversely affected during a tsunami or seiche event or be designed to allow swift water to flow around, through, or underneath without causing collapse. Other features to be considered in designing projects within areas subject to tsunami or seiche may include using structures as buffer zones, providing front-line defenses, and securing foundations of expendable structures so as not to add to debris in the flowing waters.

As stated in the DEIR, implementation of Mitigation Measure HYDRO-9 would reduce the impacts related to exposure to tsunami and seiche to a level that is less than significant.

In addition to the implementation of Mitigation measure HYDRO-9, the applicant provides the following additional details to address the tsunami risk, as stated in Section III (Corrections and Additions to the Draft EIR) of the FEIR:

1. First floor elevations of Wellness Center Buildings were raised from 18 feet to 20 feet NGVD, which is above the estimated maximum elevations of a 100-year flood event, sea level rise and the peak tsunami inundation level.[4] First Floor elevations for the Office Park are proposed at 21 and 22 feet NGVD.

2. All structures will have first floor elevations approximately 6 feet above the maximum recorded tsunami wave run-up elevation of 14.35 feet NGVD in 273 years.

3. Structures, as necessary, will be surrounded by a 4-foot tall foundation wall designed to resist and direct flow away from the buildings.

4. A vegetative buffer of wetlands trees will be installed around the perimeter of the property and will be designed to resist hydraulic flow and resist the transport of debris that may impact the Big Wave property.[5]

b. Tsunami Warning and Evacuation Processes Recommended by the County Sheriff's Office of Emergency Services and Homeland Security (OES)

According to the *Tsunami Inundation Map for Emergency Planning – County of San Mateo*, the site is within the tsunami inundation area, where the edge of the inundation zone is approximately 2,000 feet north on Airport Street to the north of the mobile home park.

Lt. Ed Barberini of the County Sheriff's Office of Emergency Services and Homeland Security (OES) has provided information on tsunami warning and evacuation processes in a comment letter dated December 21, 2009 (Comment Letter 162) and should be referenced for additional information regarding this issue. A summary of the main points of the letter is provided below:

Tsunami Inundation Map: The inundation map included in the DEIR shows the potential tsunami inundation area in Princeton. This map was produced in the mid-1990s by the University of Southern

[4] *Project elevations are based on a Base Flood Elevation (BFE) of 8.5 feet NGVD (refer to pages IV.H-17 and 18 and Figure IV.H-6 of the DEIR), a maximum recorded wave run-up elevation of 14.35 feet NGVD in 273 years, and a highest projected sea level rise over the next century of 5 feet from the current mean high tide. (Currently, mean high tide is at 3.49 feet NGVD.) Project elevations are over 5 feet above the highest of these levels (tsunami at 14.35 feet NGVD).*

[5] *"When development is to be sited within a tsunami hazard area, the physical configuration of structures and uses on a site can reduce potential loss of life and property damage. This includes the strategic location of structures and open space areas, interaction of uses and landforms, design of landscaping, and the erection of barriers" (Designing for Tsunamis: Seven Principles for Planning and Designing for Tsunami Hazards, March 2001, National Tsunami Hazard Mitigation Program, pg.21).*

California and was updated in June of 2009. As with the old maps, the updated maps were produced by the University of Southern California Tsunami Research Center, the California Geological Survey, and the California Emergency Management Agency. While the potential inundation area on the new maps is slightly less extensive, the Big Wave project remains in the hazard zone. The maps do not indicate potential inundation from a single tsunami, but instead include the potential run-up from an ensemble of seismic events including the possible impact of three local source and 12 distance source tsunamis. Any single event would not likely inundate all areas shown on the map.

Tsunami Warnings: The National Ocean and Atmospheric Administration (NOAA) staffs the West Coast Alaska Tsunami Warning Center (WCATWC) in Palmer, Alaska, where all potential tsunami-generating seismic events are analyzed. Should an event occur that could affect the west coast, an alert would be transmitted to the state and our county through a variety of channels. Depending upon the level of threat, the warning center will issue a Tsunami Warning (most urgent message), Watch (tsunami activity is expected elsewhere along the coast), or Advisory (warns of the possibility of tidal surges along beaches or in harbors with no widespread inundation expected). When a tsunami message is received in the county it is disseminated to public officials and the general public in several ways, including commercial radio and television broadcasts, landline telephones, and text messages to cell phones and email accounts. Also, a number of warning sirens are located on the San Mateo coast, including a siren at 203 Cornell Avenue which is in close proximity to the project and should be easily heard by anyone at the facility who is outdoors. If an evacuation is called for, law enforcement and fire personnel will also drive through the evacuation areas using vehicle sirens and public address systems to make sure that all people were aware of the evacuation order.

Evacuation Options:

- As a response to a possible local source tsunami following a powerful local earthquake, staff and residents of the center should walk up Airport Street towards Cypress Avenue immediately following the earthquake, as a tsunami could arrive in a matter of just a few minutes. According to the latest inundation maps, the area north of the mobile home park and will be safe ground.

- In the event of a distance source tsunami the evacuation order could last for hours. Considering that the evacuation notice could occur at night or in inclement weather, it is highly recommended that the center population move temporarily to an alternate facility. Plans call for several public schools on the coast to be used as public evacuation shelters.

- Another option would be to build a tsunami evacuation area into the Big Wave facility. Vertical evacuation is an accepted tsunami evacuation alternative in many coastal communities. A recent publication by FEMA, "Guidelines for Design of Structures for Vertical Evacuation from Tsunamis" FEMA P646/June 2008, is available for review from our office or may be downloaded at www.fema.gov/library.

In reviewing OES's comment letter, several recommendations can be identified[6], as listed below.

[6] *Phrasing is revised for presentation as a recommendation (i.e., "should" is used rather than "could").*

- Big Wave Wellness Center should maintain one or more all-hazard weather radios at the site to provide the Center timely notifications of tsunami alerts, severe weather and other regional emergencies.

- The Big Wave Wellness Center should be added to the Telephone Emergency Notification System (TENS) list to receive direct telephone notification of tsunami alerts.

- Staff and residents of the Big Wave project should have a pre-identified evacuation location and a means to get there as part of the Center's emergency plan. The plan should address both local source and distance source tsunami scenarios. Big Wave staff should make arrangements in advance with an evacuation shelter (i.e., public school) to ensure that it will be open and have room for the Big Wave population.

- Applicant should reference "Designing for Tsunamis – Seven Principles for Planning and Designing for Tsunami Hazards," National Tsunami Hazard Mitigation Program, March 2001.

To address the comments from County OES, the applicant has incorporated the following details in their project description, as stated in Section III (Corrections and Additions to the Draft EIR) of the FEIR:

Big Wave will coordinate evacuation with the County Sheriff's Office of Emergency Services and Homeland Security (OES). Big Wave will connect to the TENS system and SMC Alert. Big Wave will purchase EAS radio(s) and provide automatic broadcasting. Big Wave will integrate its PA and fire alarm system into the SMC alert system.

The Tsunami Evacuation Plan will be submitted to County OES for review and approval and will include a planned and organized evacuation by foot to a zone located approximately 2,500 feet to the north that is outside of the current evacuation zone. The applicant will conduct biannual evacuation training exercises. During these exercises, supplies will be brought to enable a comfortable and safe place within the evacuation zone until the return order is given. All equipment will be preloaded in hand carts. Longer-term evacuation will be staged in an orderly manner from this zone. The same type of evacuation will be exercised for fire and major earthquakes.

All project structures will be designed for vertical evacuation. All buildings are pier-supported steel structures with wave-energy dissipation. The second floor of the structures would exceed the height of the inundation zone. The office buildings will be designed to comply with FEMA P646/June 2008 and all evacuations will be vertical. The Wellness Center will also be designed to this standard but will evacuate by foot to the designated zone to plan for a combined fire or tsunami evacuation.

The Office Park will evacuate vertically for tsunami and to the parking lot for earthquake and fire. The buildings will store 30,000 gallons of drinking water and one week's worth of food. Since all evacuation is by foot, there would be no traffic impacts associated with the evacuation.

With some exceptions (i.e., vertical evacuation), the evacuation plan described for tsunamis will be utilized as a baseline for earthquake and fire evacuation.

The applicant's proposal to address comments from OES was forwarded to OES. In a letter to County staff dated August 17, 2010, Jim Asche, OES District Coordinator, states that the applicant has addressed all suggestions that OES originally provided in regards to evacuation procedures.

c. History of Tsunami's with Wave Run-Up in Princeton, California

According to the NOAA's National Geophysical Data Center database[7], there are only 2 tsunamis from 1806 to 2010 with recorded wave run-ups in Princeton, Ca., the 1946 tsunami and the 1960 tsunami (both are described in the DEIR on page IV.H-20). The 1946 tsunami in the Aleutian Islands had a maximum wave height of 3.96 meters, or almost 13 feet above sea level. The 1960 tsunami had a maximum wave height of 2.21 meters, or 7.25 feet above sea level. Also, refer to Response to Comment 213-35. It should be noted that, after the two Pillar Point breakwaters were constructed (in 1961 and 1980s), no wave run-ups from subsequent tsunamis were recorded in Princeton.

Pillar Point Breakwaters

There are two Pillar Point breakwaters, an inner breakwater and an outer breakwater. According to Peter Grenell[8], General Manager of the San Mateo County Harbor District, breakwaters help to protect against tsunamis, particularly the outer breakwater. The dual breakwater system provides two lines of defense against storm, wind or tsunami waves.

The inner breakwater was built in the 1980s by the Harbor District and is currently maintained by the Harbor District. The Harbor District is an independent special district funded by County property taxes. The inner breakwater is in generally good condition and does not need any major repairs. Mr. Grenell states that it can accommodate the estimated 1.4 meter sea level rise that may occur by the end of the century.[9] There is no impact fee charged to support maintenance of the breakwater.

The outer breakwater was built in 1961 by the U.S. Army Corps of Engineers (ACOE) and is currently maintained by ACOE. According to Craig Conner at ACOE[10], the outer breakwater is in generally good condition and does not need any major repairs. While the outer breakwater was not designed to accommodate tsunami or sea level rise associated with global warming, Mr. Conner indicates that the breakwater would withstand a tsunami and may be over-topped but not breached with the anticipated sea level rise associated with global warming. ACOE is undergoing planning to study the impacts of sea level rise associated with global warming.

d. Local Regulations for Development within Tsunami Hazard Areas

The following requirements of the County Zoning Regulations, followed by the applicant's response, apply to development within Tsunami Inundation Hazard Areas:

[7] *http://www.ngdc.noaa.gov/nndc/struts/form?t=101650&s=167&d=166*

[8] *Phone conversation on January 8, 2010.*

[9] *Source: Pacific Institute.*

[10] *Phone conversation on January 14, 2010.*

SECTION 6326.2. TSUNAMI INUNDATION AREA CRITERIA. *The following criteria shall apply within all areas defined as Tsunami Inundation Hazard Areas:*

(a) The following uses, structures, and development shall not be permitted: publicly owned buildings intended for human occupancy other than park and recreational facilities; schools, hospitals, nursing homes, or other buildings or development used primarily by children or physically or mentally infirm persons.

As determined by County Counsel, there may be legal limitations on the restrictions, as described in Section 6326.2(a), of such structures. The applicant would be required to comply with subsection (b) through the submittal of a report to the Planning Commission, prior to the approval of this project.

(b) Residential structures and resort developments designed for transient or other residential use may be permitted under the following circumstances:

1. The applicant submits a report prepared by a competent and recognized authority estimating the probable maximum wave height, wave force, run-up angle, and level of inundation in connection with the parcel or lot upon which the proposed development is to be located.

2. No structure covered by this section shall be allowed within that portion of the lot or parcel where the projected wave height and force is fifty (50) percent or more of the projected maximum, unless: (a) the highest projected wave height above ground level at the location of the structure is less than six (6) feet, (b) no residential floor level is less than two (2) feet above that wave height, and (c) the structural support is sufficient to withstand the projected wave force.

3. No structure covered by this section shall be allowed within that portion of the lot or parcel where the projected wave height and force is less than fifty (50) percent of the projected maximum unless the requirements of subsection b, 2), (a), and (c) are satisfied and the residential flood level is at least one (1) foot above the highest projected level of inundation.

4. Permission under this subsection shall not be granted if the Planning Commission determines that sufficient data, upon which the report required by subsection 1) must be based, is unavailable and cannot feasibly be developed by the applicant.

The report required by Section 6326.2.b.1 must be submitted to the Planning Commission and reviewed by applicable County agencies. Project compliance with Section 6326.2.b, in its entirety, must be demonstrated prior to project approval.

Design of Water and Wastewater Systems

In compliance with the Subdivision requirements for the protection of water and wastewater facilities, the Big Wave project has incorporated the following features:

1. All water recycling systems will be buried and capable of continuous operation in a submerged state. The minimum elevation of the water recycling system manholes will be 18 feet (3.5 feet above the maximum recorded tsunami inundation). All pumps will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

2. The well is located at elevation 26 feet (11.5 feet above the maximum tsunami elevation). The well utilizes a submersible pump capable of continuous operation in a submerged state. The well pump will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

3. The project backup system includes 2 days of water and wastewater storage to provide water and prevent wastewater spillage until after the tsunami event has subsided.

The County's Local Coastal Program Policy 9.3 (*Regulation of Geologic Hazard Areas*) calls for application of the following regulations of the Resource Management (RM) Zoning Ordinance to designated hazard areas. Section 6324.6 (*Hazards to Public Safety Criteria*) prohibits domestic water pumping facilities, sewage treatment, pumping, or disposal facilities to be located in these areas unless the County Engineer certifies that direct damage or indirect threat to public health and safety would be unlikely in the event of occurrence of the designated hazard(s). Approval by the County Engineer of the location of domestic water pumping facilities and wastewater treatment/recycling facilities at the project sites would be required prior to project review by the Planning Commission.

TOPICAL RESPONSE 10: FINAL GEOTECHNICAL REPORT

Generally, public comments regarding the final geotechnical report required by Mitigation Measures in Section IV.F (Geology and Soils) of the DEIR include statements that these mitigation measures defer studies required for the formulation of actual mitigation measures into the future. Also, commenters stated that that Final Geotechnical Report should be included in the EIR, so that the feasibility and potential impacts from mitigation measures can be evaluated.

Evaluation of Geological Hazard in The DEIR

As stated in Section IV.F (Geology and Soils) of the DEIR, Treadwell and Rollo reviewed available subsurface data and concluded that the proposed project, as proposed and mitigated, is feasible from a geotechnical standpoint. The DEIR contains two geotechnical reports prepared by the applicant's consultants that analyze 23 borings. Both reports were peer reviewed in the DEIR and those reviews form the basis for the impact and mitigation analyses in the DEIR. All reports can be found in Appendix F of

the DEIR. The following is a summary of the analysis pertaining to geological hazards, as discussed in the DEIR:

- Page IV.F-24 of the DEIR states under Cumulative Impacts: … "that geotechnical hazards are site specific and there is little if any cumulative relationship between development of the proposed project and related projects…. Therefore the project's contribution to significant cumulative impacts related to geology and soils would be less than significant and no mitigation measure would be required."

- Page IV.F-24 of the DEIR states under Level of Significance after Mitigation: Implementation of listed mitigations measures and compliance with applicable regulations would reduce project impacts related to geology and soils to a less than significant level.

- Impact GEO-1: Fault Rupture

  As discussed on page IV.F-18 of the DEIR, the impacts of Fault Rupture are determined to be less than significant because all proposed structures are located outside of the Earthquake Fault Zone.

- Impact GEO-2: Strong Seismic Ground Shaking

  Page IV.F-19 of the DEIR concludes that the impacts of strong ground shaking are addressed in the requirements of the 2007 California Building Code, impacts are less than significant, and no further study or mitigations are required to address the impacts of seismic ground shaking.

- Impact GEO-3: Seismic-Related Ground Failure

  The impacts of seismic-related ground failure are discussed on pages IV.F-19 and 20 of the DEIR and can be summarized as follows: Cyclic Densification is estimated to cause a differential settlement 0.5 inches to 3.5 inches on the northern parcel and 0.25 inches on the southern parcel. Liquefaction is estimated to cause up to 6 inches in settlement and differential settlement of 3 inches in 50 feet on the northern parcel and up to 2.5 inches of settlement with differential settlement of about 1.5 inches in 50 feet in the southern parcel. As described on Page IV.F-20 of the DEIR, based on the thickness and relative density of the potential liquefiable soil, the potential for lateral spreading is low. The potential for surface manifestations (e.g., sand boils or lurch cracking) is high. Mitigation Measure GEO-3b identifies the industry standard methods to address seismic-related ground failure as follows:

  1. Improving the soil with deep compaction techniques such as DDC and RIC.

  2. Supporting the buildings on stiffened shallow foundations bearing on a layer of well-compacted fill.

  3. Supporting the buildings on deep foundations such as drilled piers.

4. Construction of a structural slab that spans support between columns.

Landslides and slope instability affecting the project site is considered to be remote, due to the relatively flat nature of the site and surrounding area.

- Impact GEO-4: Total and Differential Settlement

Page IV.F-14 of the DEIR identifies the presence of 1 to 2.5 feet of expansive clayey surface soils and the impacts of soil erosion are none to slight based on the flat topography on-site. The total seismic settlement and the total differential seismic settlement are identified as potentially significant if not mitigated. Mitigation GEO-4 identifies the industry standard methods to address total and differential settlement (identical to methods described under Mitigation Measure GEO-3b, above). The proposed foundation system utilizing pier-supported interlocking grade beams is described in Section III of the FEIR and was selected in order to address hazards identified in this section. As discussed on Page IV.F-21 of the DEIR, this option reduces the potential impacts of total and differential settlement to a level that is less than significant.

- Impact GEO-5: Soil Erosion or Loss of Topsoil

As discussed on Page IV.F-22 of the DEIR, with the implementation of Mitigation Measure HYDRO-3, which requires a Stormwater Pollution Prevention Plan (SWPPP) meeting the San Francisco Bay RWQCB requirements, runoff related to erosion impacts during grading and construction phases should be reduced to a less than significant level. Also, with the installation of landscaping described in the proposed landscaping plan (refer to Figures III-23 and 24 of the DEIR) and proposed pervious surface walkways, trails, and parking lots, soil erosion on newly graded sites would represent a less than significant impact.

- Impact GEO-6: Expansive Soils

The potentially significant impacts of expansive soil are mitigated by the same standard engineering techniques as present in Mitigation Measure GEO-3b and Mitigation GEO-4, with one additional method described below:

1. A deepened spread footing system where the proposed footings gain support at or below the depth of significant seasonal moisture fluctuation and the slab-ongrade floor will be supported on a layer non-expansive fill.

As discussed in Section III of the FEIR, the project will utilize item 4, a deep pier foundation. This option as discussed on Page IV.F-23 of the DEIR reduces the potential impacts of expansive soil to less than significant.

- Impact GEO-7: Pervious Pavement and other Water and Wastewater Infiltration Systems

The design of pervious pavement and infiltration systems are impacted by the impervious surface soils. The mitigations for the impacts of impervious soils for these systems is described in Mitigation GEO-7 as follows:

1. Collecting and redirecting surface and subsurface water away from the proposed building foundations.

2. Using permeable base material within pavement areas.

3. Installing subdrains to collect and redirect water from areas that could adversely impact building foundations and vehicular pavement to a suitable outlet.

The project utilizes all three of these recommendations including relocation of impermeable material (as calculated in the grading plan illustrated in Figures III-25 and 27) and the use of concrete pavers for the parking lots and walkways. As discussed on page IV.F-24 of the DEIR, implementation of these mitigation measures reduces the potential impacts of impermeable soil to a less than significant level.

Mitigation Measure GEO-8 of the DEIR requires participation by the applicant's geotechnical consultant in the final project geotechnical design and construction. This is a standard practice.

With potential geologic hazards identified and the feasibility of mitigation determined, the role of the Final Geotechnical Report is to determine the specific design of the mitigation features. The Final Geotechnical Report will be prepared during the building permit process, as it requires specific information based on the precise locations of the building footings. The precise locations of the building footings will not be available until the project has received all required discretionary approvals during the planning phase. Once the necessary planning permits are obtained, the actual size and locations of the buildings can be established.

Specifically, the Final Geotechnical Report will determine the size, depth and number of piers. Variation in the number, depth and size of piers may result in local, temporary effects to groundwater and soils conditions (within and immediately adjacent to the footprint of the foundation), but would not impact the wetlands or other areas not proposed for development. Impacts to groundwater and soil conditions are as discussed in the DEIR. Although the size, depth and number of piers may vary depending on the Final Geotechnical Report, grading limited to the footprint of development shown in the DEIR should not result in any new significant environmental impacts.

Implementation of the recommendations of the Final Geotechnical Report and compliance with applicable regulations would reduce project impacts related to geology and soils to a less than significant level.

TOPICAL RESPONSE 11: SANITARIUM USE PERMIT

Several of the commenters stated that the Wellness Center is not a permitted use in the Waterfront (W) Zoning District and/or that the project does not meet the definition of a "sanitarium", as that term is used in the County Zoning Regulations.

The southern parcel of the project site is located within the Waterfront (W) Zoning District. The primary use of the Wellness Center is proposed to be housing for disabled adults, as allowed per Chapter 24 (Use Permits) of the Zoning Regulations. This chapter lists "sanitarium," along with similar uses such as rest homes and hospitals, as a permitted use with issuance of a Use Permit in any district within the urban areas of the Coastal Zone.

The term "sanitarium" (or sanitorium) is a term of varying definition which is not specifically defined in the Zoning Regulations. Some existing definitions and their sources are the following:

- An institution for the promotion of health (Dorland's Medical Dictionary for Health Consumers, 2007).
- A facility for the treatment of patients suffering from chronic mental or physical diseases, or the recuperation of convalescent patients (Mosby's Medical Dictionary, 8th edition, 2009).

While the Wellness Center would not provide medical treatment on-site for its intellectually or developmentally disabled (DD) adult residents, it promotes their long-term health in a holistic manner. The Wellness Center will offer DD adults social and employment opportunities, an opportunity for semi-independent living apart from their parents, and connections to support and medical services.

In light of the fact that the term is not specifically defined in the Zoning Regulations, and that it is defined in other sources in a manner that reasonably encompasses the Wellness Center concept, the County may conclude that the Wellness Center proposal falls within the meaning of "sanitarium", as defined in Section 6500.d of the Zoning Regulations.

In order to approve the Use Permit for the sanitarium use, the decision making body must make a finding that the use is "found to be necessary for the public health, safety, convenience or welfare." There appears to be a basis to allow such a finding. As described in Response to Comment 213-3 regarding project compliance with LCP Policy 3.5 (Regional Fair Share), the project helps to meet the need within the unincorporated areas of the County for affordable housing, as allocated by the Association of Bay Area Governments (ABAG). For 2007 to 2014, ABAG allocates a need for 881 affordable housing units in the area, where 523 units exist. Affordable housing for the disabled in San Mateo County is even more limited. Based on a review of County Housing Department data[11], only 356 units are available for the disabled of which only 194 units (or 54%) are affordable. As proposed and conditioned, the project would provide 57 units of affordable housing, thereby helping to bridge the gap between the need for affordable housing and the supply of affordable housing in the County unincorporated area.

[11] *San Mateo County Affordable Rental Housing for Low and Moderate Income Households, San Mateo County Department of Housing, May 1, 2008.*

Wellness Center's Accessory Uses

As stated in Section III of the FEIR, the fitness center use and auditorium proposals have been revised since the publication of the DEIR to make these facilities available only to Wellness Center residents, staff and their guests and Office Park employees. The facilities were originally available to the Coastside public, as described in the DEIR. Therefore, these uses are considered accessory uses to the sanitarium. Similarly, on-site businesses, such as catering and dog grooming, are not open to the public and would only serve employees of the Office Park. The uses would utilize office spaces and kitchen areas of the Wellness Center and would also be considered accessory uses to on-site uses. Regarding the 10,000 sq. ft. public storage facility, Section 6287 (Uses Permitted) of the Waterfront "W" Zoning District Regulations states that the "Indoor Storage of Goods, Excluding Extremely Hazardous Materials" is a permitted use in the inland area of this district and does not require a use permit. Therefore, the Wellness Center and its accessory uses are permitted, or conditionally permitted, under the current County regulations.

Parking and traffic for the originally proposed Community Center were analyzed and impacts are identified Tables IV.M-6 and IV.M-10 of the DEIR. The parking and traffic impacts were determined to be less than significant as mitigated. Under the current proposal, which is non-public, the parking and traffic impacts would be reduced further.

TOPICAL RESPONSE 12: CONSTRUCTION PHASING FOR WELLNESS CENTER AND OFFICE PARK

Generally, commenters stated that the 30-36 month time estimate provided in the DEIR for construction of the Office Park is unrealistic, due to the demand-based phasing of the Office Park buildings. Some commenters assert that construction is likely to take place over a longer time frame and result in a longer exposure to noise for people residing or working in the area.

For the purpose of noise analysis, County staff illustrates three potential scenarios for the construction of the Office Park buildings, each resulting in somewhat different noise impacts. County staff realizes that, in reality, there may be 20 potential scenarios, but in order to simplify the range of possible construction scenarios for noise impact analysis, three scenarios are described. The following three scenarios turn on variations in the demand for mixed office space and vary in the following factors: 1) number of buildings being constructed at any given time, 2) continuous or non-continuous construction (gaps or no gaps in time between buildings), and 3) the total duration for the completion of construction. The three possible construction scenarios are summarized below, with further detail provided after:

- 3-Year Office Park Completion Timeframe: Assumes high demand for mixed office space, and thereby concurrent construction of all four buildings. Buildings are completed within a 3-year timeframe, with high noise levels but over a shorter duration.

- 20-Year Office Park Completion Timeframe: Assumes low demand for mixed office space, and thereby non-concurrent, non-continuous construction of all four buildings, in which each

building is constructed separately with gaps of months or years in between. Buildings are completed within a 20-year timeframe, with lower noise levels during construction, no noise during gaps in construction, over a much longer duration.

- 7.4 Year Wellness Center and Office Park Completion Timeframe: Assumes lower demand for mixed office space, but enough demand to warrant non-concurrent, continuous construction, in which each building is constructed separately with no gaps in between. Buildings are completed within a 7.4-year timeframe, with lower noise levels in the short-term, but extended over a longer duration.

3-Year Office Park Completion Timeframe

As stated in revisions to the project description in Section III (Corrections and Additions to the Draft EIR), under a scenario with high demand for office space and concurrent construction, the project construction time schedule would be between approximately 30 and 36 months to fully complete the Wellness Center and Office Park property development. Over the short-term, people residing or working in the area would be exposed to higher noise levels. However, in the long-term, the people residing or working in the area would be exposed to no construction-related noise once construction is completed. Based on current conditions, this scenario appears less likely than others.

20-Year Office Park Completion Timeframe

This scenario, which appears the most likely based on current conditions, includes non-continuous construction with gaps of months or years between the construction of each of the four buildings, where building construction would be non-concurrent. In this scenario, it could take up to 20 years for the mixed office space to be completely constructed. However, this would not be considered the most impactful scenario, with regard to noise. In the short-term, this scenario would involve a shorter period of noise levels compared to the 3-Year construction scenario, where all the buildings are built within 30-36 months. However, in the long term, people residing or working in the area would be exposed to construction-related noise over 20 years, with gaps of months or years between the construction of each building. Therefore, the 20-year build out scenario would not be considered the most impactful scenario with regard to noise.

7.4-Year Wellness Center and Office Park Completion Timeframe

Under a low demand for office space, a scenario which would present the greatest noise impacts would involve an approximately 7.4-year construction timeframe, in which building construction for all the Wellness Center and Office Park buildings are non-concurrent and continuous. Under this scenario, Office Park buildings would be individually constructed over a period of four years.

Table II-5
Revised Table IV.J-11 of DEIR
Construction Schedule and Equipment

Activity	3-year Scenario* (Schedule in Months)	7.4-Year Scenario (Schedule in Months)
Initial Grading/Material Sorting	*0.75 months (3 weeks)*	*0.75 months (3 weeks)*
Utilities Installation	*1 month*	*1 month*
Foundation Construction	*2 months*	*8 months*
Wellness Center	*30 months*	*30 months*
Office Park: Building A		12 months
Office Park: Building B		12 months
Office Park: Building C		12 months
Office Park: Building D		12 months
Permeable Parking Lot/Trails	0.75 months (3 weeks)	0.75 months (3 weeks)
Total Time Frame: Office Park Buildings Only	**N/A**	**48 (4 years)**
Total Time Frame: Office Park and Wellness Center	**34.5 months (2.9 years)**	**88.5 (7.4 years)**

*From Table IV.J-11 of DEIR.

Note: For more information regarding phased construction, refer to Appendix G, Additional Applicant-Provided Information Regarding Construction Phasing and Schedule.

Environmental Impact Analysis of 7.4-Year Wellness Center and Office Park Completion Scenario

Instead of the non-concurrent, continuous construction assumed under this scenario, Office Park construction is more likely to be demand-based and subject to fluctuations in the economy, with gaps of months or years between the construction of each of the four buildings. This 7.4-Year scenario would only occur in the event of continuous low demand, in which the developer could not anticipate demand for the next building. In this scenario, the developer builds the Wellness Center and each Office Park Building individually instead of benefiting from the economies of scale inherent in building 2 or more buildings at a time. Therefore, as this scenario would also result in the inefficient use of construction materials and labor, it would not be preferred by the developer. However, for the purposes of environmental analysis, a scenario of 7.4 years is considered.

The DEIR evaluated the impacts of project construction based on a high-demand scenario. An analysis of the environmental impacts associated with the 7.4-year construction schedule is provided in Section III.C (Environmental Analysis) of this FEIR. In general, the analysis assumes that construction will be less concentrated (fewer vehicles and construction workers) and spread out over a longer time frame. Also, as construction-related impacts are temporary, the 7.4-year construction schedule may have some temporary positive or negative impacts compared to the 3-year construction schedule; but, after project construction and during full project operation, impacts would be identical. Therefore, the 7.4-year construction schedule would not change impact analyses related to project operation (i.e., utilities, land use and planning, operational traffic, etc.).

Specifically, the following assumptions inform the analysis:

- Initial Grading/Material Sorting: No change. Work for all Office Buildings will be done concurrently during Phase 1.

- Utilities Installation: No change. Work for all Office Buildings will be done concurrently during Phase 1.

- Foundation Construction: The number of excavators, earth boring equipment, dump trucks and other vehicles associated with concurrent foundation construction for 4 buildings would be reduced by one-quarter. The duration of foundation work for one building would be shorter than for four buildings, but would occur four times within 7.4 years.

- Wellness Center/Office Park Construction: The number of cranes and other vehicles associated with concurrent construction for 4 buildings would be reduced by one-quarter. The duration of building construction work for one building would be shorter than for four buildings, but would occur four times within 7.4 years.

- Permeable Parking Lot/Trails: The parking lots would be built in phases to meet the parking requirements of each individual building. The number of concrete trucks and other vehicles associated with concurrent parking lot construction for 4 buildings would be reduced by one-quarter. The duration of parking lot construction for one building would be shorter than for four buildings, but would occur four times within 7.4 years. It is assumed under this scenario that parking lot construction for each building would occur within the 1-year timeframe of construction for each building (e.g., parking lot construction would occur during the interior finish phase of each building).

As described in Section III.C (Environmental Analysis) of this FEIR, the 7.4-year construction schedule would not result in any significant new impacts requiring mitigation and, in some cases, would result in temporary positive impacts.

TOPICAL RESPONSE 13: COUNTY PERMIT HISTORY

Generally, public comments regarding violations at the project site make assertions involving one or both of the following: 1) that the property owner destroyed wetlands on the southern project parcel through recent, illegal grading and filling, specifically referring to the disappearance of a "finger" of wetlands shown on a 1994 map prepared by the US Army Corps of Engineers; and/or 2) that the existing agricultural well on the Office Park site never received a Coastal Development Permit or Exemption and is not legal.

The following table shows all violation cases associated with both project parcels:

Table II-7
Violation Cases by Site as of August 2, 2010

	Description	Date of Case Creation	Applicant	Official Case Status
Wellness Center Site (Southern Parcel)				
VIO 95-0174	Outdoor storage without a use permit.	11/10/1995	Prior owner	Closed on 3/15/1996: Items were cleared.
VIO 2005-00190	Portable water tanks and other equipment (including portable generator) installed without the required CDP.	10/4/2005	Big Wave, LLC	Remains open to address well that does not have an approved CDX or CDP.
Office Park Site (Northern Parcel)				
VIO 2002-00155	Grading and fill without permit and accumulation of debris on property.	8/21/2002	Steve Barber	Closed on 7/30/2003: Inspector could not confirm grading or fill activities. Debris removed.
VIO 2003-00164	Grading and fill work started before permit issued.	10/30/2003	Steve Barber	Closed on 11/17/2003: Inspector could not confirm grading or fill activities, only vegetation removal outside of wetland areas.
VIO 2005-00049	Clearing of riparian vegetation.	3/7/2005	Big Wave, LLC	Closed on 8/30/2005: Area outside of riparian area was cleared for fire control.
VIO 2005-00190 (same as above)	Portable water tanks and other equipment (including portable generator) installed without the required CDP.	10/4/2005	Big Wave, LLC	Remains open to address well that does not have an approved CDX or CDP.

1) Assertion that the property owner destroyed wetlands on the southern project parcel through recent, illegal grading and filling, specifically referring to the disappearance of a "finger" of wetlands shown on a 1994 map prepared by the U.S. Army Corps of Engineers.

The 1994 map was prepared by the Army Corps of Engineers (ACOE) at the request of San Mateo County as part of the County's acquisition of the Pillar Point Marsh area. The map is titled "Pillar Point Marsh, Half Moon Bay, CA., San Mateo County, Request for Sec. 404 Jurisdictional (File No. 20375S20)," dated June 20, 1994. The map (Attached as Figure C of the FEIR) shows the extent and location of Corps of Engineers jurisdiction on this date, which indicates wetland areas over a large portion of the southern parcel (covering the west, north and center of the parcel with a finger extending to Airport Street). A letter from ACOE, dated July 19, 1994, accompanies the map and states that this jurisdictional delineation will expire in three years from the date of the letter.

The assertion that the property owner destroyed wetlands through recent, illegal grading and filling relates to County violations cases, VIO 2002-00155 and VIO 2003-0164 and MNA 2006-00012. While VIO 2002-00155 and VIO 2003-0164 were resolved for reasons outlined in the table above, the file for MNA 2006-00012 contains greater specificity regarding the role of agricultural activities in the disappearance of the "finger" of wetland on the southern parcel. In response to public inquiries to the County Planning and Building Department regarding the deposition of a large amount of soil at the property, the County Current Planning Section initiated inspections and research under file MNA 2006-00012 to determine the purpose and impact of the earth moving activities to Pillar Point Marsh. In correspondence dated June 23, 2006, Jim Eggemeyer, Deputy Director at that time, determined that the "new soil that has been brought into the site is for spreading, soil blending and enrichment purposes for the upcoming pea/bean planting" and that the activity is "exempt under Section 8603.12 of the County Ordinance Code regarding routine agricultural activities."

In separate correspondence dated October 26, 2006, Dave Holbrook, Senior Planner, records his observations during a follow-up inspection of the site performed with Sam Herzberg of the County Department of Parks and Recreation. He confirms that "the 'finger' of delineated wetland previously stretching from the main marsh edge to Airport Street is gone," adding that during a prior inspection of the site with Mr. Herzberg on June 22, 2006, "the 'finger' portion of wetland had already been removed." He states that after having reviewed 2003 Google aerial maps as well as 1996 County aerial maps, "both appear to show that the subject wetland "finger" portion was already gone and had been cultivated over." Mr. Holbrook states that "this suggests that at least this portion of the wetland area was already gone (cultivated over) long before the [agricultural] activity [he and Mr. Herzberg] saw in June."

Correspondence from Mr. Eggemeyer and Mr. Holbrook identifies neither illegal grading nor filling activities at the site nor the destruction of the wetlands. Instead, soil application activities during this time have been determined to be a part of routine agricultural activities and, through a review of aerial photographs, County staff has confirmed that the "finger" of wetland on the southern parcel had disappeared by 1996. In addition, the 1994 wetland delineation prepared by ACOE expired in 1997. The ACOE's approval on June 5, 2008 of the November 20, 2007 wetland delineation by WSP, shown on Figures III-2A and 2b of the DEIR, confirms the current delineation and supersedes the 1994 wetland delineation.

More Information on Wetland Delineations for the Project Sites

On-site wetlands were delineated in the report titled, "An Analysis of the Geographic Extent of Waters of the United States, Including Wetlands on the Big Wave Property" prepared by WSP Ecosystem Science and Natural Resources Management (March 2008), provided in Appendix E of the DEIR. The delineation was based on both the Federal definition and the Local Coastal Program definition of wetlands. The WSP report and delineation, based on field surveys conducted in 2007 and revised in March 2009, has been certified by ACOE and is the basis for the DEIR evaluation. Appendix E of the DEIR also includes a Biological Impact Report prepared by Wetlands Research Associates in 2001 for a different project and the subsequent Wetlands Delineation Report prepared by CAJA (not certified by ACOE).

2) Assertion that the existing agricultural well on the northern parcel never received a Coastal Development Permit or Exemption and is not legal.

This assertion relates to open County violation case VIO 2005-00190. While the County is unable to find documentation of the issuance of a Coastal Development Permit or Exemption for the agricultural well on the northern parcel, the County has confirmed that the well was approved by the San Mateo County Public Health Division. In a letter dated February 25, 1987, the San Mateo County Public Health Division approved the well at the property for potable use for agricultural, single family residential and commercial/industrial uses (letter is included in Attachment K of the DEIR). The letter states that additional chemical analysis may be required as deemed necessary by the Public Health Division for well use as a public non-community water supply or public community water supply as defined by the California Safe Drinking Water Act.

In connection with the instant review of this project, the applicant has applied for a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, for use of an existing agricultural well for domestic purposes. Therefore, the review and approval of a Coastal Development Permit for the proposed domestic well use will also resolve the coastal permit status of the well.

TOPICAL RESPONSE 14: LOCATION OF PROJECT NEAR HALF MOON BAY AIRPORT

Generally, public comments regarding Half Moon Bay Airport focus on the concerns of placing residential units in close proximity to the airport. Concerns expressed focus on potential impacts related to safety, noise, electromagnetic fields, and dust. Comments also focused on the County's responsibility to maintain compatible land uses adjacent to the airport due to the County's acceptance of grants from the Federal Aviation Administration (FAA).

Safety Hazards: Impact HAZ-3 (Hazards Associated with Airport Operations) on page IV.G-24 of Section IV.G (Hazards and Hazardous Materials) of the DEIR states that, although the project does propose structures within the Airport Overlay (AO) Zoning District, the structures do not include

residential uses or uses with three or more persons occupying the use at one time, as consistent with AO setback requirements.

In Comment Letter 169, a representative of the California Department of Transportation, Division of Aeronautics, states that the project site appears to be within the Inner Approach and Departure Zone 2 of the Half Moon Bay Airport, as designated in the California Airport Land Use Planning Handbook (Handbook). According to the Handbook, Zone 2 extends beyond and (if the Runway Protection Zone (RPZ) is narrow) along side the RPZ, and, together with the RPZ, 30% to 50% of near-airport aircraft accident sites lie within the RPZ and Zone 2. Within Zone 2, Table 9B of the Handbook recommends the basic compatibility qualities, including prohibiting residential uses except on large, agricultural parcels and limiting nonresidential uses to activities which attract few people.

Regarding Zone 2, neither the Airport Land Use Commission nor the County has mapped this zone for Half Moon Bay Airport. The California Airport Land Use Planning Handbook (Handbook) provides guidance in determining the dimensions of Zone 2. The Handbook provides safety compatibility zone examples for general aviation airports, but acknowledges that there are many variables which affect accident distribution patterns and attendant risks to land uses near airports, variables which are dependent upon the configuration, usage and operational variables of each airport. The Table 9A of the Handbook lists key airport operational variables which warrant consideration during the development of safety compatibility zones for an individual airport. Displaced landing thresholds such as those at Half Moon Bay Airport, are among such variables. These factors must be considered in determining the shapes and sizes of the zones.

As stated by the commenter and in Table 9B of the Handbook, the location of Zone 2 is directly linked to the location of Zone 1, in that Zone 2 extends beyond and, if the Runway Protection Zone (RPZ) is narrow, along side the RPZ. The location of Zone 1 for this airport has been established. As shown in the *Half Moon Bay Airport: Airport Layout Drawing*, approved by the Federal Aviation Administration (FAA) on October 3, 2006, the RPZ (Zone 1) for this airport is located entirely on airport property and is defined by the following dimensions: 250’ x 1000’ x 450’.

For the purpose of responding to the comment regarding Zone 2 for this EIR, the County used Example 4 of Figure 9K of the Handbook and the FAA-approved map of Zone 1 as a starting point. Figure 9K illustrates that Zone 2 extends beyond Zone 1 and tracks the width of Zone 1. The combined length of Zones 1 and 2 are 4,000’ as shown in Example 4. Therefore, applying the methodology of Example 4, Zone 2 could be approximately 3,000’ in length and 450’ wide. With this understanding, it appears that Zone 2 would not extend over the project parcels.

The County believes that the above analysis with respect to the comment is adequate for the purpose of CEQA. It also acknowledges that any final determination of the dimensions of Zone 2 would involve assessment and consideration by the County Airport Land use Commission.

Airport Noise

Noise Measurement Methodology:

As stated on page IV.J-12 of the DEIR, based on the Appendix G of the State *CEQA Guidelines*, a project could have a significant noise impact if it would cause any of the following conditions to occur:

(a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

(b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airstrip, expose people residing or working in the project area to excessive noise levels; or

(f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

As shown above, for noise level measurement for noise thresholds for CEQA thresholds (c) and (d), ambient noise levels are specified, not single-event noise levels. The difference between decibels (dBA) and Community Noise Equivalent Levels (CNEL) units of noise level measurement is that dBA reflects how humans experience noise, while CNEL reflects noise averaged over 24-hours. Noise levels measured by the noise specialist retained by Christopher A. Joseph and Associates were measured in dBA but recorded ambient noises (e.g., aircraft and other environmental noises, such as cars, birds, dogs, tractors, etc.). Ambient noise levels accurately reflect how noise is experienced within the context of a complex environment. Based on the foregoing, single-event noise analysis (i.e., aircraft noise only) is not required by CEQA.

Office Park: The San Mateo County Airports Noise Abatement Procedures handout identifies a portion of the Office Park site as one of several "extremely noise sensitive areas." No residential units are proposed on this parcel. Page IV.N-10 of Section IV.J (Noise) of the DEIR provides Land Use Compatibility Guidelines for Office Buildings, Business and Professional Commercial uses, as well as for Industrial and Manufacturing uses in Table IV.J-5. Specifically, normally acceptable noise levels are 50 to 70 dBA CNEL for Office Buildings, Business and Professional Commercial uses and 50 - 75 dBA CNEL for Industrial and Manufacturing uses.

Regarding exterior noise levels, analysis contained in Impact NOISE-3 (Operational Noise Levels at the Project Site) presents a future average daily exterior noise level of 58.5 dBA.[12] As the noise standards allow for noise levels of up to 70 or 75 dBA CNEL within the exterior activity areas of the proposed commercial/industrial use, exterior noise levels as the Office Park site would be in compliance with these standards.

Regarding interior noise levels, analysis contained in Impact NOISE-3 presents a future average daily interior noise level of <45 dBA for the proposed office use, which reflects an exterior-to-interior noise reduction of more than 30 dBA from the future average daily exterior noise level of 58.5 dBA. As stated in the DEIR, the exterior-to-interior reduction of newer homes in California is generally more than 30 dBA. As the noise standards allow for interior noise levels within the proposed residential uses of up to 45 dBA CNEL, interior noise levels at the Office Park site would be in compliance with these standards. As stated in the DEIR, this is a less than significant impact and no mitigation measures are required.

Wellness Center: As stated on page IV.N-10 of Section IV.J (Noise) of the DEIR, noise provisions are outlined in Chapter 4.88 (Noise Control) in the San Mateo County Ordinance Code. Exterior and interior noise standards for any single or multiple family residence, school, hospital, church, or public library properties are presented in Tables IV.J-6 and J-7. Specifically, noise levels within the exterior activity areas of the proposed residential uses may not exceed 70 dBA CNEL and interior noise levels within the proposed residential uses may not exceed 45 dBA CNEL.

Regarding exterior noise levels, analysis contained in Impact NOISE-3 (Operational Noise Levels at the Project Site) presents a future average daily exterior noise level of 58.8 dBA. As the noise standards allow for noise levels of up to 70 dBA CNEL within the exterior activity areas of the proposed residential uses, exterior noise levels as the Wellness Center site would be in compliance with these standards.

Regarding interior noise levels, analysis contained in Impact NOISE-3 presents a future average daily interior noise level of <45 dBA for Building 1, which reflects an exterior-to-interior noise reduction of more than 30 dBA from the future average daily exterior noise level of 58.8 dBA. As stated in the DEIR, the exterior-to-interior reduction of newer homes in California is generally more than 30 dBA. As the noise standards allow for interior noise levels within the proposed residential uses of up to 45 dBA CNEL, interior noise levels at the Wellness Center site would be in compliance with these standards. As stated in the DEIR, this is a less than significant impact and no mitigation measures are required.

Current Noise Abatement Procedures at Half Moon Bay Airport

It should be noted that the Half Moon Bay Airport currently implements the following Noise Abatement Procedures to reduce noise impacts to neighbors[13]:

- No intersection take-offs.

[12] *According to the San Mateo County Comprehensive Airport Plan (1981) and the Noise Element of the San Mateo County General Plan, noise levels associated with operations at Half Moon Bay Airport are less than 60 dBA CNEL at the project site.*

[13] *Half Moon Bay Noise Abatement Procedures, San Mateo County Airports.*

- No turns until reaching 500' MSL.
- Reduce power/rpm as soon as safe and practical.
- Pattern work, especially touch-and-goes, is discouraged at night and on weekend and holiday mornings.
- No stop-and-goes.
- Fly Right Traffic for Runway 30, and Left Traffic for Runway 12.
- Avoid flying over St. Catherine Hospital, located just north of the airport.
- Main pattern altitude (1000' MSL) until necessary to descend for landing.
- Avoid flying over homes whenever possible.
- No straight-in arrivals.
- Arrivals from the west fly overhead the airport at or above 1,500' MSL; continue outbound until clear of the traffic pattern and make a normal 45-degree entry into the downwind leg at 1,000' MSL.
- Aircraft over 12,500 lbs. prohibited without prior approval of the airport manager.
- Use common sense and be considerate to airport neighbors.

County Responsibility to Maintain Compatible Land Uses Adjacent to the Airport

Mitigation Measure HAZ-3 requires, prior to approval of final development plans, an avigation easement to be executed and recorded for the project site, in a form satisfactory to the County Director of Public Works. The mitigation measure requires the avigation easement to be recorded and shown on the vesting tentative map. Even without implementation Mitigation Measure HAZ-3, Impact HAZ-3 on page IV.G-25 states that the project would result in a less than significant impact associated with airport safety hazards to people residing or working in the area of a public airport. The mitigation measure does not reduce potential hazard impact, but is a disclosure tool that preserves the County's ability to continue airport operations in that, through the recordation of the easement, the property owner grants a right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity.

The grant conditions imposed by the Federal Aviation Administration (FAA) with respect to Half Moon Bay Airport require that the County limit land uses around airports to those that are compatible with airport use. In a letter dated July 8, 2010, a representative of the FAA reiterated that, based on grant conditions (Assurance 21, Compatible Land Use), airport sponsors are required to take appropriate action to restrict use of land adjacent to the airport to activities that are compatible with normal airport operations (refer to Appendix I of the FEIR). The letter further states that, generally, while planning and environmental documents proffer that there will not be any negative environmental impacts related to the proximity of the Wellness Center to the airport (e.g., noise impacts), based on past cases, the FAA

representative believes that the Wellness Center residents will complain about noise associated with the airport. Also based on past experience, the FAA representative states that the public policy reaction to the complaints will be proposals to impose additional restrictions on normal airport operations.

In response to the FAA's letter, Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations) has been revised, as described in Section III of the FEIR, to further clarify and disclose the potential airport noise to the Wellness Center owner(s), staff, and residents:

> Prior to approval of final development plans, an avigation easement shall be prepared for the project site, the County Director of Public Works. The avigation easement shall be recorded and shown on the vesting tentative map. With approval of the Wellness Center, it is understood that the Wellness Center property owner(s) and tenants, and their successor's in interest in perpetuity, acknowledge the project's location adjacent to an airport and the noise level inherent in the use. The following statement shall be included in the details of the avigation easement on the recorded Final Map, prior to the issuance of the Certificate of Occupancy for any residential unit at the subject property:
>
> > "This parcel is adjacent to the Half Moon Bay Airport. Residents on this parcel may be subject to inconvenience or discomfort arising from airport operations, including but not limited to aircraft landings, take-offs, in air maneuvers and fly-overs, and on-the-ground engine start-ups and taxing. San Mateo County recognizes the value of the Half Moon Bay Airport to the residents of this County and intends to preserve airport operations, existing and future, from significant interference and disruption. With approval of the Wellness Center, it is understood by both the Wellness Center property owner(s) and the Half Moon Bay Airport that airport operations shall continue, notwithstanding noise complaints received from property owners, residents, staff, guests, and others from the Wellness Center. In the event that the Wellness Center resident(s) or property owner(s) are unwilling to live under such noise conditions and/or remain unsatisfied with the noise reduction measures being implemented by the airport, the affected resident(s) shall be relocated, with assistance provided by the property owner, to the satisfaction of the Planning and Building Department and/or the Department of Housing.

As proposed, the Wellness Center buildings incorporate sound insulation and sound deflection and are shielded with landscaping designed to provide further noise buffering. In response to the FAA's letter, the applicant has offered to make interior modifications to the Wellness Center floor plan to further reduce noise levels to Wellness Center residents. The applicant proposes the following interior changes:

1. Relocate the residential units so that they are as far as possible from the airport.

2. Construct the storage units and athletic facilities along the length of Building A of the Wellness Center, such that the non-residential areas are used to separate and buffer the residential units from the airport, further insulting the units from airport related noise.

3. Construct the residential units such that all face to the west and away from the airport, whereby no residential windows will face the airport and the residents.

As the local land use authority, the County has the authority to determine whether the sanitarium use is a compatible land use. Impact LU-2 of Section IV.I (Land Use and Planning) of the DEIR analyzes the project's consistency with applicable land use plans, policies and regulations and concludes that the project complies with zoning requirements that address, among other things, the compatibility of the project with surrounding land uses. The section states that land use and planning impacts would be less than significant and no mitigation measures are required.

Electromagnetic Disturbance: Use of radio communications equipment at the Half Moon Bay Airport is a potential source of electromagnetic frequency. The ground-level use of radio communications equipment, if it were to occur to a significant enough extent, could impact the health of the residents at the Wellness Center. In-air, use of radio communications equipment, due to the proximity from the Wellness Center, is not anticipated to have any impact on Wellness Center residents. As there is no air traffic control tower at this airport, the primary source of ground-level use of radio communications equipment is aircraft to aircraft communication while taxiing or landing. However, given current operations at the airport, ground-level communication can be expected to be irregular, infrequent, and a low level source of electromagnetic frequency. The World Health Organization (WHO), based on a in-depth review of the scientific literature, concluded that current evidence does not confirm the existence of any health consequences from exposure to low-level electromagnetic fields. Therefore, health impacts related to the use of electromagnetic fields associated with airport operations are considered less than significant.

Dust: The types of dust (considered particulate matter or PM) generated by the airport is anticipated to be similar to dust generated from car traffic (e.g., brake pad particles and diesel soot). As stated in Table IV.C-7 of Section IV.C-5 (Air Quality) of the DEIR, the project, including mobile and area sources such as motor vehicle trips, would not generate average daily direct and indirect emissions of ROG, NOx, or PM_{10} that would exceed BAAQMD-recommended thresholds. Air pollutant emissions from project-related ground traffic are anticipated to be greater than from the airport. Therefore, impacts related to operational emissions for the project would be less than significant.

TOPICAL RESPONSE 15: PROJECT POTABLE AND RECYCLED WATER DEMAND

Generally, public comments regarding the DEIR's analysis of project water consumption assert the presence of inconsistencies and call for additional studies or information to adequately analyze the impacts of water consumption.

The applicant estimates project potable water demand at 10,000 gpd and recycled water demand at 16,000 gpd, for a total potable and recycled water demand of 26,000 gpd. However, page IV.N-36 of the DEIR states an estimate of 16,000 to 17,000 gpd of potable water demand is more realistic, because there are limited uses for recycled water, where the DEIR estimates a project recycled water demand of about 9,000 – 10,000 gpd for toilet flushing uses only. However, the DEIR does not consider other uses of recycled water, such as landscape irrigation and solar panel and other surface washing uses, as proposed by the applicant. Based on a demand of 10,000 gpd of recycled water, the DEIR estimates that the rest of the 26,000 gpd water demand will be met using potable water (16,000 gpd).

The following table illustrates how the total water demand for the project is calculated. The table reflects a revised water demand that accounts for uses of recycled water that were not considered by the DEIR.

The table represents recycled and potable water demand in a range, to accommodate both the limited and wider use of recycled water, from 9,000 to 16,000 gpd. Subsequently, the varying ranges of recycled water use result in a proportional range of potable water use, from 10,000 to 17,000 gpd, to make up the total water demand of 26,000 gpd.

Table II-8
Calculation of Water Demand

Water Source	Wellness Center Demand (gpd)	Office Park Demand (gpd)	TOTAL
Persons	**70**	**800**	**870**
TOTAL Water Use (Potable and Recycled)	**6,000**	**20,000**	**26,000**
Personal Water Use (Potable and Recycled)	3,500	20,000	
Water Use/Per Person	*50 gpd*	*25 gpd*	
Non-Personal Water Uses	**2,500**	**0**	
Kitchen	700	0	
Laundry	800	0	
Showers (Pool, Gym)	1,000	0	
TOTAL Recycled Water Use	**Up to 2,000[3]**	**9,000[1] - 14,000**	**9,000 - 16,000**
Toilet Flushing Only (Recycled)	1,050	9,000[1] -12,000	
Water Use/Per Person	*15*	*15 gpd*	
Solar Panel and Surface Washdown	950	Up to 2,000	
TOTAL Potable Water Use[5]	**4,000 – 6,000[3]**	**6,000 – 11,000[4]**	**10,000 – 17,000[2]**

[1]Represents a conservative volume of recycled water use based on toilet flushing uses only, as calculated in DEIR.

[2]Applicant estimates total potable water demand at 10,000 gpd, but DEIR assumes that potential potable water demand could be as high as 16,000 to 17,000 gpd, based on recycled water use involving only toilet-flushing.

[3]DEIR was unable to verify the use of recycled water in toilets in the Wellness Center and, therefore, estimates 0 gpd of recycled water use and assigns the 6,000 gpd of water demand to potable water use. However, as described in Section III of the FEIR, the applicant maintains that 2,000 gpd of recycled water will be used for toilet flushing at the Wellness Center.

[4]Since the DEIR estimates recycled water use based on toilet flushing uses only (9,000 gpd) and maintains the same total water use (20,000 gpd), the DEIR's estimate of potable water use increases to 11,000 gpd for the Office Park. However, the applicant states that there is no increase in potable water uses and offers a variety of uses for recycled water (i.e., landscape irrigation and surface washdown). Therefore, the applicant states that potable water use would not exceed 6,000 gpd at the Office Park. However, a range is given for potable water use, consistent with the estimates in the DEIR.

[5]Total potable water use is calculated by subtracting the low and high range estimates of recycled water use from total water use (potable and recycled).

The following table compares recycled and potable water demand to supplies of each, as estimated in the DEIR. The last column of the table shows that the total available supply of potable well water is between 24,000 to 47,500 gpd. The lower range of potable well water supply, 24,000 gpd, exceeds the upper limit of potable water demand, 17,000 gpd. The upper limit of potable water use would be reduced by approximately 20% in drought years to 12,800 gpd, due to potable water conservation measures. Page IV.N-36 of the DEIR states, that assuming the upper limit of potable water consumption at 17,000 gpd,

the existing well capacity is sufficient to meet this higher net water demand. Therefore, this represents a less than significant impact.

Table II-9
Estimated Water Demand (Includes Potable and Recycled), based on DEIR Analysis

Water Source	***Wellness Center Demand (gpd)***	***Office Park Demand (gpd)***	***Total Demand (gpd)***	***Total Supply (gpd)***
Potable (Well) Water	4,000 – 6,000[2]	6,000 – 11,000[2]	10,000 – 17,000[2]	24,000 to 47,500[1]
Recycled Water	0 - 2,000[2]	9,000[2] – 14,000[2]	9,000 - 16,000[2]	26,000
Total	**6,000**	**20,000**	**26,000[3]**	**N/A**

Notes: 1) GPD = Gallons Per Day

[1]Per the DEIR and the technical data contained in it, the well is capable of delivering approx. 24,000 gpd in a 12-hour period and 47,500 gpd over a 24-hour period.

[2]Range from Table II-8 (see notes in Table II-8).

[3]Based on average year conditions. For drought years, applicant states that maximum potable water demand for the project will decrease from 26,000 gpd to approx. 21,000 gpd during periods of drought, including 5,000 gpd of potable water and 16,000 gpd of recycled water.

The following table illustrates that 26,000 gpd is the upper limit of wastewater generation. Wastewater generation would be reduced in drought years to 21,000 gpd, due to water conservation measures. The table illustrates the applicant's intent is to use all treated wastewater on-site through toilet flushing, solar panel and surface washing as well as irrigation uses. The volume of recycled water used for each of these uses will vary depending on use of recycled water for toilet flushing. For instance, if less recycled water is used for toilet flushing, more recycled water will be used for landscape watering. Minimum recycled water demands for the proposed landscaping are described in Table II-11 (Minimum Plant Recycled Water Demand (Dry & Wet Season)). Unused treated wastewater, should there be any, will be disposed into the Granada Sanitary District system.

Table II-10
Estimated Project Wastewater Generation and Disposal, based on DEIR Analysis

	Volume (*gpd*)	
	Average Year	*Drought Year*
Total Project Wastewater Generation[1]	26,000	21,000
Use of Treated Wastewater [2] *(treated to Title 22 Requirements)*		
Toilet flushing, Solar Panel and Surface Washing	9,000[4] - 16,000	9,000[4] - 16,000
Irrigation (on-site farm and landscaping) [5]	10,000 – 17,000[4]	5,000 - 12,000[4]
Total Excess Treated Wastewater[3]	**0**	**0**

[1]Based on total water usage for both Wellness Center and Office Park
[2]The applicant's intent is to use all treated wastewater on-site. Disposal method will vary based on quantity of recycled water flushed in toilets. If less is used, then more recycled water will be used for irrigation.
[3]Unused treated wastewater, should there be any, will be disposed into the Granada Sanitary District system.
[4]The DEIR estimates recycled water use based on toilet flushing uses only at 9,000 gpd.
[5]Estimates based on Table II-11.

Section III.B (Revisions to the Draft EIR) of the FEIR describes the proposed wetlands restoration and uplands landscaping. As shown in Table II-11 (Minimum Plant Recycled Water Demand (Dry & Wet Season), proposed planting has been sized and designed to utilize all the recycled water produced by the project that is not used for toilet flushing, approximately 5,000 to 17,000 gallons per day. The wetlands plants require saturated soil conditions all year long. To saturate the soil during the summer, about 0.2 gallons per day is required per shrub and about 0.5 gallons per day is required per tree (refer to Appendix K of the DEIR, as revised in the FEIR). Based on this estimate, project landscaping is designed to accommodate approximately 16,000 gallons of water per day for a successful restoration. The wetlands restoration will be watered with a minimum of 6 circuits, allowing watering for each circuit once every 6 days to allow the soil to drain. The wetlands restoration will receive irrigation during the dry months for approximately 10 years. Potable water will not be used for watering landscaping.

Table II-11 **Approximate[1] Plant Recycled Water Demand (Dry & Wet Season)**				
Landscaping	**Total No.**	**Approximate Recycled Water Needs per Plant (gpd)**	**Approximate Total Recycled Water Demand (Dry Season) (gpd)**	**Approximate Total Recycled Water Demand (Wet Season) (gpd)**
Wetlands				
Trees	5,500	0.5	2,750	--
Shrubs	13,500	0.2	2,700	--
			5,450	
Uplands				
Trees (wetlands)	4,000	1.0 - 2.0	4,000	8,000
Shrubs (wetlands)	6,000	0.25 - 0.5	1,500	3,000
			5,500	*11,000*
Organic Garden/Native Plant Nursery				
Plants	10,000	0.5	5,000	5,000
Total Wetlands Trees	**9,500**			
TOTAL	**39,000**	**--**	**16,000**	**16,000**

[1] The table represents approximate recycled water demand. Actual use of recycled water may be higher or lower, varying with the amount of recycled water used for toilet flushing. No potable water would be used for plant watering.

GPD = Gallons per day

Source: Appendix K of the DEIR, as revised in the FEIR

The storage capacity of the on-site recycled water storage tank provides additional flexibility for the use and storage of excess treated wastewater:

At peak development there will be approximately 40,000 gallons of recycled water storage on site in interconnected buried tanks. The lower 10,000 gallons of storage is reserved for toilet flushing and building wash down. The next 10,000 gallons per day will be reserved for organic farming (during the summer only). The remaining 20,000 gallons of storage will be reserved for wetlands and uplands restoration. When the recycled water volume exceeds 40,000 gallons, the excess will be routed to the GSD system.

Based on the foregoing, impacts of project water consumption to the existing well (Impact UTIL-9) and impacts of project wastewater treatment, recycling, and disposal (Impact UTIL-4) would be considered less than significant with mitigations included in the DEIR.

III. CORRECTIONS AND ADDITIONS TO THE DRAFT EIR
A. CHANGES TO THE PROJECT DESCRIPTION

INTRODUCTION

This chapter presents minor changes to the Draft EIR since the publication of the Draft EIR. Changes involve corrections and additions that have been made to clarify, correct, or add to the environmental impact analysis for the Draft EIR. Changes to the Draft EIR derive either from public and agency comments, from additional information desired by the Lead Agency since publication of the Draft EIR, or changes required by mitigation measures of the DEIR. Changes initiated by the Lead Agency include minor revisions to clarify the project description and to refine Alternative C. The changes do not affect the conclusions of the Draft EIR.

The changes to the Draft EIR do not require recirculation of the EIR because they do not result in any increased environmental effects that would alter or modify the conclusions of significance contained in the Draft EIR. The corrections and additions do not identify any new significant impacts, and, therefore, do not require additional mitigation measures or alternatives to the proposed project. However, new and corrected mitigation measures have been added in order to ensure regulatory compliance, provide clarification, and improve the intended effect of the mitigation measures identified in the DEIR. These are minor changes that do not require recirculation of the EIR (CEQA Guidelines Section 15088.5(b)).

This chapter is separated into four sections:

The first section, **Section III.A (Changes to the Project Description)**, summarizes changes to the project description and shows corresponding text changes in the Project Description section of the Draft EIR. Changes to the Project Description section of the Draft EIR are listed by the page number and title of the revised section (e.g., page III-19 (Facilities)). Deletions are shown with strikethrough and additions are shown with underline.

The second section, **Section III.B (Revisions to the Draft EIR)**, presents revisions to all other sections of the Draft EIR. Changes to the Draft EIR are listed by the corresponding Draft EIR Section, page number, and title of the revised section (e.g., page IV.L-20 (Impact PS-2)). Deletions are shown with strikethrough and additions are shown with underline.

The third section, **Section III.C (Environmental Analysis)**, provides an analysis of the environmental impacts of changes to the Draft EIR.

The forth section, **Section III.D (New Figures)**, presents new figures, which are differentiated from figures from the DEIR that have been revised. Figures from the DEIR that have been revised are listed and provided in Section III.A (Changes to the Project Description) and Section III.B (Revisions to the Draft EIR) of the FEIR, respectively.

CHANGES TO THE PROJECT DESCRIPTION

Summary

The following is a summary of key changes to the Project Description contained in the DEIR, as described in this section of the FEIR:

A. Wellness Center Site:

- Changes to Comply with Mitigation Measure CULT-2: The Wellness Center has been reduced in size from 78,785 sq. ft. to 74,648 sq. ft., and the number of residential units has been reduced from 70 units to 57 units, in order to avoid disturbance of the archeological site identified on the project site. Additional site plan changes associated with the reduction of the size of the Wellness Center include relocation and incorporation of the public storage building (for business storage only) and communications building (originally on the Office Park parcel) into the design of the Wellness Center. The public storage use at the Wellness Center site has been reduced from 20,000 sq. ft. to 10,000 sq. ft. The seven (7) Wellness Center buildings and outdoor recreation facilities shown in the DEIR have been condensed into 2 buildings with indoor recreation facilities.

- Elimination of Community Center: The Community Center has been removed to reduce environmental impacts. The pool, fitness center, and locker facilities will now be restricted for use by Wellness Center residents, staff and their guests and Office Park employees only. Initially, these facilities were proposed to be available to the general public.

- Changes to First Floor Elevations to Comply with Mitigation Measure HYDRO-9: First floor elevations of Wellness Center Buildings have been raised from 18 feet to 20 feet National Geodetic Vertical Datum **(**NGVD), which is above the estimated maximum elevations of a 100-year flood event, sea level rise and the peak tsunami inundation.[1] This change has been accompanied by a reduction in the vertical size of the buildings, so that their height above natural grade remain the same as described in the DEIR.

- Additional Information Provided by the Applicant to Comply with Mitigation Measures GEO-1 through GEO-8: The project will incorporate a foundation of drilled pier supported interlocking grade beams. The Final Geotechnical report will include Cone Penetration Tests (CPTs) performed at the final foundation locations to determine the size, length and number of the piers required to support the buildings and limit settlement to code allowed values. All utilities will be constructed of materials that can withstand site settlement, as described in the DEIR, without rupture. Utility connections within buildings will utilize flexible connections

[1] *Project elevations are based on a Base Flood Elevation (BFE) of 8.5 feet NGVD (refer to pages IV.H-17 and 18 and Figure IV.H-6 of the DEIR), a maximum recorded wave run-up elevation of 14.35 feet NGVD in 273 years, and a highest projected sea level rise over the next century of 5 feet from the current mean high tide. (Currently, mean high tide is at 3.49 feet NGVD.) Project elevations are over 5 feet above the highest of these levels (tsunami at 14.35 feet NGVD).*

designed to accommodate differential settlement as described in the DEIR. All expansive surface soils will be removed under the permeable concrete pavement and replaced with permeable soils or gravel in accordance with Mitigation Measure GEO-7.

- Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): Text additions acknowledge the importance of the Half Moon Bay Airport to the residents of this County and require the Big Wave non-profit organization to inform its residents of aircraft noise, the existence of the avigation easement and that if aircraft noise, consistent with the terms of the avigation easement, is unacceptable to the resident, the resident will be required to relocate.

B. Office Park Site:

- Office Park Shuttle: Prior to occupancy of any Office Park building, the applicant will implement Traffic Demand Management (TDM) measures, including an off-site parking agreement and/or shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic. This change in the project description resulted from public comments and Lead Agency input.

- Modified Alternative C: Alternative C of the DEIR has been modified to further reduce impacts, based on public comments and Lead Agency input. With the following minor revisions, Modified Alternative C has been found to be the Environmentally Superior Alternative:

    - Design: In order to increase the compatibility of the buildings with the commercial/industrial Princeton area, the modified alternative retains the same square footage as the original alternative, but rather than the four large 2-story buildings that were originally proposed, Alternative C includes eight smaller buildings (2 stories in the front row closest to Airport Street and 3 stories in the back row).

    - Building Footprint: The original Alternative C would have resulted in a 41% increase in the project footprint. The modified alternative would result in a 15% increase in the project footprint compared to the original Office Park proposal, while retaining the same total building square footage.

    - Traffic: Modified Alternative C includes an option to direct all construction traffic and project operational traffic to the south through the commercial area of Princeton, avoiding the residential area of Moss Beach, as shown on the traffic circulation plan for Modified Alternative C.

    - Additional Information Provided by the Applicant to Comply with Mitigation Measures GEO-1 through GEO-8: The project will incorporate a foundation of drilled pier supported interlocking grade beams. The Final Geotechnical report will include Cone Penetration Tests (CPTs) performed at the final foundation locations to determine the size, length and number of the piers required to

support the buildings and limit settlement to code allowed values. All utilities will be constructed of materials that can withstand site settlement, as described in the DEIR, without rupture. Utility connections within buildings will utilize flexible connections designed to accommodate differential settlement as described in the DEIR. All expansive surface soils will be removed under the permeable concrete pavement and replaced with permeable soils or gravel in accordance with Mitigation Measure GEO-7.

C. Utilities:

- Clarification of Water Source Options: As described by the DEIR, the project will use an on-site well and water treatment system to provide water for domestic purposes, and a wastewater treatment and recycling system to provide water for toilet flushing and other non-potable purposes. Water for fire protection and emergency domestic backup will be obtained by securing a municipal connection to the Coastside County Water District (CCWD).

  The FEIR clarifies that additional water supply options include obtaining both domestic and fire protection water from CCWD; or, using the Wellness Center swimming pool and/or below ground 180,000 gallon tank for some or all of the water needed for fire protection purposes.

- Clarification of Wastewater System Options: In the DEIR, the proposed options for wastewater systems were: (1) use of an on-site wastewater treatment plant with disposal through irrigation and infiltration through three drainfields, and/or (2) municipal hookups. The following clarification is based on public and agency comments.

  The FEIR clarifies wastewater systems options as: (1) use of an on-site wastewater treatment plant with disposal through a combination of municipal hookup and on-site recycled water usage, and/or (2) municipal hookups.

  This clarification eliminates the three sub-surface drain fields from the project. All wastewater will be treated to a level meeting Title 22 requirements. A majority of treated wastewater will be recycled through toilet flushing, below-ground drip irrigation of on-site landscaping, and surface and solar panel washing. Any excess recycled water will be directed into the Granada Sanitary District (GSD) system. The GSD connection will also provide emergency back-up wastewater treatment. Accordingly, the FEIR further clarifies that a connection for a total of 8 EDUs will be purchased for emergency and excess discharge into the Granada Sanitary District (GSD) system. Securing such a connection from GSD is a condition of approval of this project. Twenty-four hour storage of influent and effluent will be provided onsite for flow equalization to insure that the GSD system capacity will not be exceeded during normal operation and peak wet weather flows.

- Membrane Bioreactor (MBR) Wastewater Treatment Plant: The MBR plant originally proposed on the Wellness Center was redesigned and relocated due to the requirements of Mitigation Measures CULT-2 (avoidance of cultural site), UTIL-4 (providing 100% storage

of daily influent and effluent), and UTIL-6 (providing creek crossing). The single "Wastewater Treatment Plant" described in the DEIR was separated into smaller plants of the same total capacity in order to better suit the phased construction of Office Park buildings. Small MBR plants would be located in separate on-site locations within proposed building footprints for treatment of wastewater (both black and grey as proposed in the DEIR) produced on-site.

D. Stormwater Drainage:

The project, as described in the DEIR, directed roof drainage into "rain gardens" in the wetlands. Project drainage is revised to direct all of the roof runoff through a perforated pipe system to an infiltration system located in trenches below the parking lots. Likewise, all surface water in the parking lots would be absorbed into the permeable pavers and infiltrate into the same system. The parking lot infiltration system is sized for a 10-year storm and includes 6 inches of concrete, underlain by 12 inches of open graded baserock, which then sits on clayey sandy soils. Both the concrete and baserock have permeabilities of 3 inches per hour, with the underlying soil having a permeability of one-half inch to 1 inch per hour. The project as described in the FEIR proposes no storm drainage system and would infiltrate all storm drainage. Based on the elimination of surface water runoff from rooftops, the project will not increase or only minimally increase storm runoff and surface flows from existing conditions.

E. Landscaping for Both Project Sites:

In addition to the 29,000 proposed trees and plants in the Planting Plan, a vegetative buffer of 4,000 upland trees and about 6,000 upland shrubs will be installed around the perimeter of the property that will provide a visual and noise buffer. These plantings will be designed in accordance with the Palustrine Scrub Shrub I and II Palustrine Forest I of the "90% Basis of Design - Riparian and Water/Wetlands Ecosystem Restoration" added to Appendix E of the DEIR. This tree selection maximizes the biological benefits of the proposed landscape plan. Trees would be watered using recycled water via subsurface drip irrigation.

F. Corrections:

- Coastal Development Permit (CDP) from California Coastal Commission (CCC): California Coastal Commission (CCC) staff has contacted the County and indicated that the CCC believes that a portion of the project site lies within the original permit jurisdiction of the CCC. If the CCC staff is correct as to this point, a separate CDP would be required from the CCC with respect any portions of the site lying within the CCC's original permit jurisdiction, in addition to the CDP required from the County of San Mateo. The County has made no determination regarding whether the CCC actually has original permit jurisdiction, but based on CCC staff input, the CCC has been added as a State agency in Section III of the FEIR from which a discretionary approval may be required.

- Correction to Zoning: Portions of the wetland and wetland buffer zones on the project sites are zoned Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD), as shown in Figure A of the FEIR.

- Amendment to the County of San Mateo and Half Moon Bay Local Coastal Plans (LCPs): Amendment of the County of San Mateo and Half Moon Bay LCPs is not required for project implementation.

Figures

This section provides information on figures that have been revised as well as narrative clarification/correction of figures in the DEIR. Revised Figures are provided on the following pages.

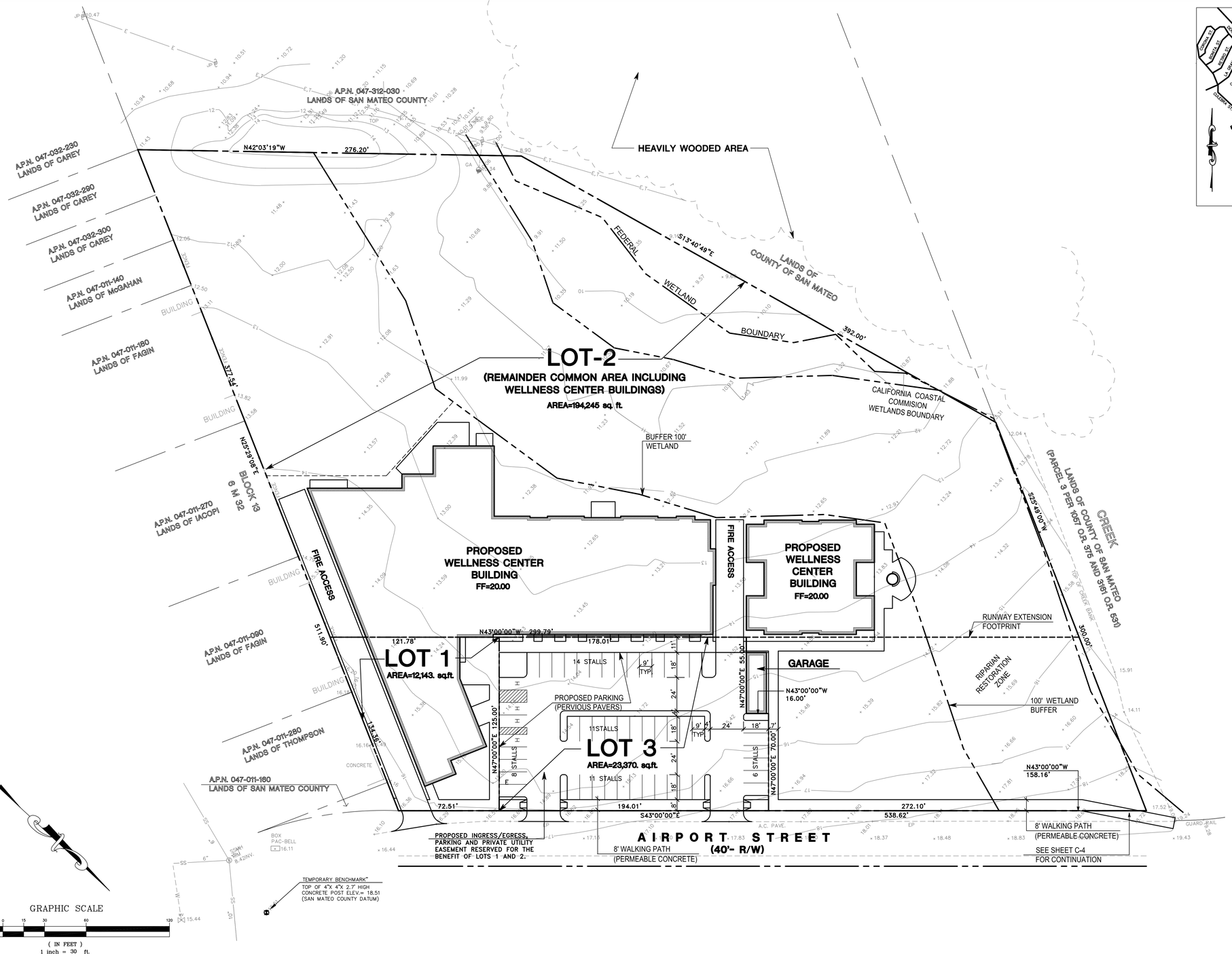
Revised Figures

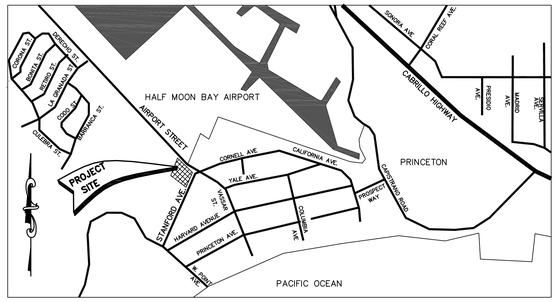
- REVISED Figure III-16 (Wellness Center Site Plan): The site plan for the Wellness Center has been revised to comply with Mitigation Measure CULT-2 and Mitigation Measure HYDRO-9. It should be noted that Figures III-17 through III-20 are still relevant to the project.

- REVISED Figure III-23 (Office Park Property Planting Plan): This figure has been revised to reflect uplands planting proposal.

- REVISED Figure III-24 (Wellness Center Property Planting Plan): This figure has been revised to reflect uplands planting proposal.

- REVISED Figure III-27 (Water Treatment Plant): This figure has been revised to reflect a modular wastewater treatment system





LOCATION MAP

SCALE: NOT TO SCALE

RECORD OWNER AND SUBDIVIDER:

BIG WAVE LLC
P.O. BOX 700
BELMONT CA. 94002

LAND SURVEYOR AND CIVIL ENGINEER:

MacLEOD & ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

ASSESSOR'S PARCEL NUMBER:

047-312-040

EXISTING ZONING:

W/DR – LIGHT INDUSTRIAL WITH DESIGN REVIEW

UTILITIES:

GAS AND ELECTRICITY:	PACIFIC GAS AND ELECTRIC COMPANY
SANITARY SEWER	GRANADA SANITARY DISTRICT
WATER:	COASTSIDE WATER DISTRICT
TELEPHONE:	A.T. & T
FIRE PROTECTION:	HALF MOON BAY

FLOOD ZONE:

" C "

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POLE
E.P.	EDGE OF PAVEMENT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
15	NEW CONTOUR LINE
WW	WELL WATER
RW	RECYCLED WATER
PVJT	PRIVATE JOINT TRENCH
PJT	PUBLIC JOINT TRENCH
RWD	RAINWATER DRAIN FOR ROOF RUNOFF

PARKING NOTE:

TYPICAL PARKING STALL DIMENSIONS = 9' X 18'

TREE NOTE:

THERE ARE NO EXISTING TREES ON THE SUBJECT PROPERTY.

EASEMENT NOTE:

PRIVATE UTILITY EASEMENTS WILL BE RESERVED OVER EACH PARCEL FOR THE BENEFIT OF THE OTHER PARCELS, WHERE APPROPRIATE. THE DELINEATION OF THOSE EASEMENTS IS NOT SHOWN ON THESE PLANS, BUT WILL BE CONFIGURED AND DELINEATED DURING THE BUILDING PERMIT PROCESS.

LICENSED LAND SURVEYOR — MICHAEL G. MACLEOD — No. 5304 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — MICHAEL G. MACLEOD — No. 35048 CIVIL — STATE OF CALIFORNIA

Revised Figure III-16 of the FEIR

W:\Projects\Proj-00\1584-00\+gradingplan_2\1584-VESTING_UPDATE.dwg

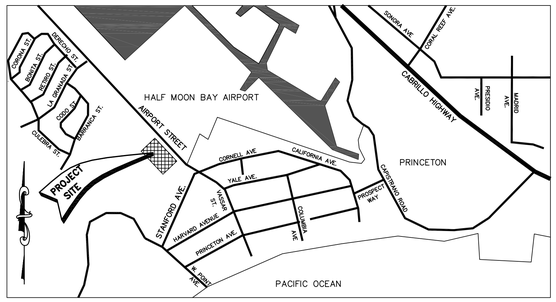
DATE:	BY:	DESCRIPTION	REV.:

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

VESTING TENTATIVE PARCEL MAP
BEING A SUBDIVISION OF A.P.N. 047-312-040
BIG WAVE WELLNESS CENTER
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 30'
DATE:	05/17/10
DRAWING NO.	1584-00
SHEET	C-1



LOCATION MAP

NOT TO SCALE

GENERAL NOTES:

1. ELEVATIONS AND LOCATIONS OF ALL UTILITY CROSSINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION AFFECTING SAID LINES. CONTACT USA AT (800) 642–2444 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION.
2. ALL APPLICABLE WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY OF SAN MATEO STANDARD TECHNICAL SPECIFICATIONS AND DETAILS, PREPARED IN THE OFFICE OF THE ENGINEERING DIVISION, INCLUDING MODIFICATIONS CONTAINED HEREIN.
3. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED WALLS, FENCES, SERVICES, UTILITIES, IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, DUE TO CONTRACTORS WORK.
4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE INSTALLATION OF FACILITIES BY PG&E, PACIFIC BELL, AND CABLE TV INSTALLATION. VALVE BOXES AND STRUCTURES TO BE SET TO GRADE IN CONCRETE AFTER PAVING.
5. THE CONTRACTOR SHALL GIVE THE COUNTY ENGINEER AT LEAST TWO WORKING DAYS ADVANCE NOTICE FOR INSPECTION. (650) 363–4100.
6. FOR LANE CLOSURES, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND SHALL OBTAIN APPROVAL OF THE COUNTY ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE FLAGMEN, CONES AND BARRICADES, AS NECESSARY TO CONTROL TRAFFIC AND PREVENT HAZARDOUS CONDITIONS.
7. PEDESTRIAN, PUBLIC ACCESSES, SHALL BE MAINTAINED DURING THE CONSTRUCTION TO THE SATISFACTION OF THE COUNTY ENGINEER.
8. NO TRENCHES OR HOLES SHALL BE LEFT OPEN OVERNIGHT; USE STEEL PLATING OR HOT MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES OVERNIGHT.
9. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE COUNTY ENGINEER.
10. THE GEOTECHNICAL REPORT PREPARED BY BAY AREA GEOTECHNICAL GROUP, PROJECT NO. BIGWA–01–00, DATED MAY 7, 2002 SHALL BE MADE A PART OF THIS PLAN.

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE
WW	WELL WATER
RW	RECYCLED WATER
PVJT	PRIVATE JOINT TRENCH
PJT	PUBLIC JOINT TRENCH

WETLAND BOUNDARY
HELICAL WIND GENERATORS
100'-0" BUFFER ZONE
FIRE TRAIL
COASTAL TRAIL EXTENSION TO POST PROPERTY
ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES
PF I
PF II
PF III
PSS I
PSS II
PE I
PE II
PE III
SWS
UP I
FF=21.0 BUILDING C 1st 18,000 SF 2nd 18,000 SF 36,000 SF
FF=21.0 BUILDING D 1st 18,000 SF 2nd 18,000 SF 36,000 SF
FF=22.0 BUILDING B 1st 18,000 SF 2nd 18,000 SF 36,000 SF
FF=22.0 BUILDING A 1st 18,000 SF 2nd 18,000 SF 36,000 SF
TRANSFORMER PAD
SSMH 16.20 INV
SSMH 19.0 INV
SSMH 18.04 INV
RUNWAY EXTENSION FOOTPRINT
WALKING PATH
AIRPORT STREET
TEMPORARY BENCHMARK: ELEV.= 27.46 NAIL & SHINER SAN MATEO COUNTY DATUM

WETLAND / RIPARIAN PLANTING PLAN

UP I	Upland I - Coastal Scrub (17)	PE II	Palustrine Emergent II - Rush Meadow (3, 5, 8)
PF I	Palustrine Forest I - Arroyo Willow Riparian Forest (1, 15)	PE III	Palustrine Emergent III - Rain Garden (21, 22, 24 ,25)
PF II	Palustrine Forest II - Live Oak Riparian Forest (6, 11, 14)	SWS	Stormwater Swale (19, 20, 23)
PF III	Palustrine Forest III - Rain Garden (18)	WS	Western Sycamore
PSS I	Palustrine Scrub Shrub I - Mixed Willow Scrub Shrub (2, 7, 13)		Windthrow
PSS II	Palustrine Scrub Shrub II - Arroyo Willow Scrub Shrub (10, 12)	14	Planting Polygon
PE I	Palustrine Emergent I - Sedge Meadow (4, 9, 16)		

LANDSCAPING PLAN

O	Live Oak
M	Madrone
B	California Buckeye
BLM	Big Leaf Maple
A	Red Alder / Leopard Rush / Santa Barbara Sedge / Lily Perimeter Alley

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

Revised Figure III-23 of the DEIR

FIGURE 5

DATE	DESCRIPTION	REV.	BY
7/30/08			

DESIGNED BY WSP

REGISTERED PROFESSIONAL ENGINEER — No. 35048 Exp. 9–30–2009 CIVIL — STATE OF CALIFORNIA

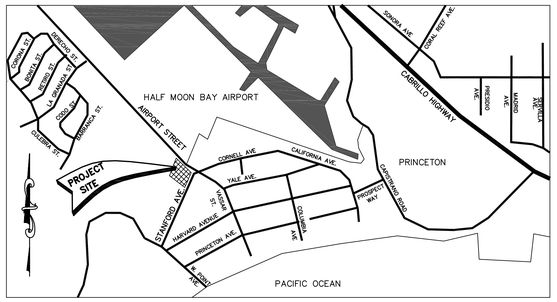
MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593–8580

WSP
WSP ENVIRONMENT & ENERGY
ECOSYSTEM SCIENCE & NATURAL RESOURCES MANAGEMENT SERVICES
160 FRANKLIN STREET STE 300 - OAKLAND - CA 94607 - (510) 208 3715

PREPARED FOR: BIG WAVE LLC

DRAFT PLANTING PLAN
BIG WAVE OFFICE PARK
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	07/30/08
DRAWING NO.	1608–00
SHEET	P-1



LOCATION MAP

SCALE: NOT TO SCALE

WETLAND / RIPARIAN PLANTING PLAN

UP I	Upland I - Coastal Scrub (54)	PE II	Palustrine Emergent II - Rush Meadow (34, 42)
PF I	Palustrine Forest I - Arroyo Willow Riparian Forest (28, 32, 51)	PE III	Palustrine Emergent III - Rain Garden (27, 38, 45)
PF II	Palustrine Forest II - Live Oak Riparian Forest (36, 40, 47, 53)	SWS	Stormwater Swale
PF III	Palustrine Forest III - Rain Garden (31, 49)	WS	Western Sycamore
PSS I	Palustrine Scrub Shrub I - Mixed Willow Scrub Shrub (37, 39, 46, 48, 52)		Windthrow
PSS II	Palustrine Scrub Shrub II - Arroyo Willow Scrub Shrub (26, 29, 35, 41, 50)	14	Planting Polygon
PE I	Palustrine Emergent I - Sedge Meadow (30, 33, 43)		

LANDSCAPING PLAN

O	Live Oak
M	Madrone
B	California Buckeye
BLM	Big Leaf Maple
A	Red Alder / Leopard Rush / Santa Barbara Sedge / Lily Perimeter Alley

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9. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE CITY COUNTY.
10. THE GEOTECHNICAL REPORT PREPARED BY BAY AREA GEOTECHNICAL GROUP, PROJECT NO. PECKJ–01–00, DATED JUNE 13, 2000 SHALL BE MADE A PART OF THIS PLAN.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOW LINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
WM	WATER METER
DCV	DETECTOR CHECK VALVE
BFV	BACKFLOW
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
15	NEW CONTOUR LINE
FS	FIRE SERVICE LINE
DW	DOMESTIC WATER LINE
WW	WELL WATER
RW	RECYCLED WATER
PVJT	PRIVATE JOINT TRENCH
PJT	PUBLIC JOINT TRENCH
RWD	RAINWATER DRAIN

REVISED Figure III-24
Note: Does not reflect revised Wellness Center Site Plan

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

FIGURE 4

DATE	DESCRIPTION	BY
7/30/09		

DESIGNED BY WSP

REGISTERED PROFESSIONAL ENGINEER DANIEL G. MCLEOD No. 35048 Exp. 9-30-2009 CIVIL STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
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160 FRANKLIN STREET STE 300 - OAKLAND - CA 94607 - (510) 208-3715

PREPARED FOR:
BIG WAVE LLC

DRAFT PLANTING PLAN

BIG WAVE WELLNESS CENTER
AIRPORT STREET
SAN MATEO COUNTY
PRINCETON BY THE SEA
CALIFORNIA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 30'
DATE:	
DRAWING NO.	1584–00
SHEET	P-2

Upland I - Coastal Scrub — Polygons #17, 54

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Unit Total
Shrubs and Vines					
Baccharis pilularis	70	25	11293.38	0.26	18
Calystegia purpurata ssp. *purpurata*	27	40	11293.38	0.26	7
Ceanothus thyrsiflorus	222	14	11293.38	0.26	58
Eriogonum latifolium	436	10	11293.38	0.26	113
Eriophyllum staechadifolium	222	14	11293.38	0.26	58
Lupinus variicolor	70	25	11293.38	0.26	18
Marah fabaceus	27	40	11293.38	0.26	7
Mimulus aurantiacus	436	10	11293.38	0.26	113
Rhamnus californica	194	15	11293.38	0.26	50
Ribes sanguineum var. *glutinosum*	70	25	11293.38	0.26	18
Symphoricarpos mollis	38	30	11293.38	0.26	10
Graminoids					
Bromus carinatus	10	65	11293.38	0.26	3
Chlorogalum pomeridianum var. *divaricatum*	9	70	11293.38	0.26	2
Iris douglasiana	34	38 ft. clumped	11293.38	0.26	9
Juncus patens	48	30	11293.38	0.26	12
Forbs					
Aster chilensis	34	38 ft. clumped	11293.38	0.26	9
Scrophularia californica	70	25	11293.38	0.26	18
Erigeron glaucus	436	10	11293.38	0.26	113
Horkelia californica ssp. *californica*	436	10	11293.38	0.26	113
Lotus formosissimus	70	25	11293.38	0.26	18
Potentilla glandulosa ssp. *glandulosa*	436	10	11293.38	0.26	113
Ferns and Fern Allies					
Polystichum munitum	48	30	11293.38	0.26	12

Palustrine Scrub-Shrub I - Mixed Willow Scrub-Shrub — Polygons #2, 7, 13, 37, 39, 44, 46, 48, 52

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
Shrubs and Vines					
Salix lasiolepis	436	10 ft clumped	55080.47	1.26	551
Salix sitchensis	436	10 ft clumped	55080.47	1.26	551
Artemisia douglasiana	194	15	55080.47	1.26	245
Clematis lasiantha	70	25	55080.47	1.26	89
Lonicera involucrata var. *ledebourii*	222	14	55080.47	1.26	281
Marah fabaceus	56	28	55080.47	1.26	71
Ribes sanguineum var. *glutinosum*	70	25	55080.47	1.26	89
Sambucus racemosa var. *racemosa*	48	30	55080.47	1.26	61
Graminoids					
Iris douglasiana	34	38 ft. clumped	55080.47	1.26	43
Juncus patens	48	30	55080.47	1.26	61
Forbs					
Aster chilensis	34	38 ft. clumped	55080.47	1.26	43
Oenanthe sarmentosa	48	30	55080.47	1.26	61
Heracleum lanatum	48	30	55080.47	1.26	61
Scrophularia californica	70	25	55080.47	1.26	89
Ferns and Fern Allies					
Polystichum munitum	48	30	55080.47	1.26	61

Palustrine Scrub-Shrub II - Arroyo Willow Scrub-Shrub — Polygons #10, 12, 26, 29, 35, 41, 50 13, 26, 29, 35, 41, 50

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
Shrubs and Vines					
Salix lasiolepis	436	10 ft clumped	$2417.79	1.20	525
Calystegia macrostegia	109	20	$2417.79	1.20	131
Lonicera involucrata var. *ledebourii*	194	15	$2417.79	1.20	233
Marah fabaceus	56	28	$2417.79	1.20	67
Ribes sanguineum var. *glutinosum*	70	25	$2417.79	1.20	84
Sambucus racemosa var. *racemosa*	48	30	$2417.79	1.20	58
Graminoids					
Iris douglasiana	34	38 ft. clumped	$2417.79	1.20	41
Juncus patens	48	30	$2417.79	1.20	58
Leymus triticoides	9	70	$2417.79	1.20	11
Forbs					
Aster chilensis	34	38 ft. clumped	$2417.79	1.20	41
Scrophularia californica	109	20	$2417.79	1.20	131
Ferns and Fern Allies					
Polystichum munitum	48	30	$2417.79	1.20	58

Palustrine Forest I - Arroyo Willow Riparian Forest — Polygons #1, 15, 28, 32, 51

Species	per acre)	Spacing (ft)	Area (sq ft)	Area (acres)	Total
Trees					
Alnus rubra	436	10 ft clumped	44537.21	1.02	446
Salix lucida ssp. *lasiandra*	681	8 ft clumped	44537.21	1.02	696
Shrubs and Vines					
Cornus sericea ssp. *sericea*	681	8	44537.21	1.02	696
Lonicera hispidula var. *ledebourii*	10	65	44537.21	1.02	10
Marah fabaceus	5	90	44537.21	1.02	5
Ribes sanguineum var. *glutinosum*	9	70 ft clumped	44537.21	1.02	9
Salix lasiolepis	303	12 ft clumped	44537.21	1.02	310
Salix sitchensis	303	12 ft clumped	44537.21	1.02	310
Sambucus racemosa var. *racemosa*	7	80	44537.21	1.02	7
Graminoids					
Carex obnupta	222	14	44537.21	1.02	227
Juncus effusus	194	15	44537.21	1.02	198
Scirpus microcarpus	436	10 ft clumped	44537.21	1.02	446
Herbs					
Aralia californica	10	65	44537.21	1.02	10
Aster chilensis	24	43 ft clumped	44537.21	1.02	25
Euthamia occidentalis	10	65	44537.21	1.02	10
Oenanthe sarmentosa	436	10	44537.21	1.02	446
Scrophularia californica	48	30	44537.21	1.02	49
Stachys ajugoides var. *ajugoides*	76	24	44537.21	1.02	78
Forbs, Ferns, and Fern Allies					
Polystichum munitum	10	65	44537.21	1.02	10

Palustrine Forest II - Live Oak Riparian Forest — Polygons #6, 11, 14, 36, 40, 47, 53

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
Trees					
Aesculus californica	8	85 ft clumped	33634.31	0.77	6
Quercus agrifolia	194	15 ft clumped	33634.31	0.77	150
Shrubs and Vines					
Heteromeles arbutifolia	25	42	33634.31	0.77	19
Lonicera involucrata var. *ledebourii*	99	21	33634.31	0.77	76
Marah fabaceus	12	60	33634.31	0.77	9
Oemleria cerasiformis	40	33	33634.31	0.77	31
Rhamnus californica	10	65	33634.31	0.77	8
Ribes sanguineum var. *glutinosum*	10	65 ft clumped	33634.31	0.77	8
Rosa californica	70	25	33634.31	0.77	54
Symphoricarpos mollis	70	25	33634.31	0.77	54
Graminoids					
Bromus carinatus	1210	16	33634.31	0.77	934
Chlorogalum pomeridianum var. *divari*	82	23	33634.31	0.77	63
Elymus glaucus	109	20	33634.31	0.77	84
Iris douglasiana	109	20 ft clumped	33634.31	0.77	84

Palustrine Forest III - Rain Garden — Polygons #18, 31, 49

Species	per acre)	Spacing (ft)	Area (sq ft)	Area (acres)	Total
Trees & Shrubs					
Salix lucida ssp. lasiandra	681	8' oc	4164.56	0.10	65
Shrubs					
Oemleria cerasiformis	76	24' clumped	4164.56	0.10	7
Cornus sericea ssp. sericea	76	24' clumped	4164.56	0.10	7
Graminoids					
Calamagrostis foliosa	1742	5' oc	4164.56	0.10	167
Carex amplifolia	1742	5' oc	4164.56	0.10	167
Carex densa	1742	5' oc	4164.56	0.10	167
Carex obnupta	1210	6' oc	4164.56	0.10	116
holciformis	1210	6' clumped	4164.56	0.10	116
Juncus effusus var. brunneaus	202	12' clumped	4164.56	0.10	19
Lilium pardalinum	30	38' clumped	4164.56	0.10	3
Lysichiton americanus	1210	6' oc	4164.56	0.10	116
Scirpus microcarpus	1210	6' oc	4164.56	0.10	116
eurycarpum	1210	6' oc	4164.56	0.10	116
Forbs					
Aralia californica	303	12' oc	4164.56	0.10	29
Aster chilensis	1210	6' clumped	4164.56	0.10	116
Helenium bigelovii	202	12' clumped	4164.56	0.10	19
Solidago californica	1210	6' oc	4164.56	0.10	116
Ferns and Fern Allies					
Polystichum munitum	202	12' clumped	3215.37	0.07	15

Palustrine Emergent I - Sedge Meadow — Polygons #4, 9, 16, 30, 33, 43

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
Graminoids					
Carex obnupta	1551	5.3	6083.58	0.14	217
Juncus balticus	681	8	6083.58	0.14	95
Juncus effusus var. *pacificus*	681	8	6083.58	0.14	95
Scirpus microcarpus	1210	6	6083.58	0.14	169
Forbs					
Helenium puberulum	170	16	6083.58	0.14	24
Oenanthe sarmentosa	109	20	6083.58	0.14	15
Sparganium eurycarpum ssp. *eurycarpum*	109	20	6083.58	0.14	15

Palustrine Emergent II - Rush Meadow — Polygons #3, 5, 8, 34, 42

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
Graminoids					
Juncus balticus	889	7	7854.63	0.18	160
Juncus effusus var. *pacificus*	889	7	7854.63	0.18	160
Juncus patens	1210	6	7854.63	0.18	218
Scirpus microcarpus	889	7	7854.63	0.18	160
Forbs					
Helenium puberulum	170	16	7854.63	0.18	31
Oenanthe sarmentosa	109	20	7854.63	0.18	20
Potentilla anserina var. *pacifica*	109	20	7854.63	0.18	20
Mentha arvensis	70	25	7854.63	0.18	13
Stachys ajugoides var. *ajugoides*	170	16	7854.63	0.18	31

Palustrine Emergent III - Rain Garden — Polygons #21, 22, 24, 25, 27, 38, 45

Species	Density (# per acre)	On Center Spacing (ft)	Area (sq ft)	Area (acres)	Total
Graminoids					
Carex densa	2723	4' oc	8094.18	0.19	506
Carex obnupta	2723	4' oc	8094.18	0.19	506
Carex tumicola	2723	4' oc	8094.18	0.19	506
Festuca rubra	2723	4' oc	8094.18	0.19	506
Juncus effusus var. brunneaus	1210	6' clumped	8094.18	0.19	225
Lilium pardalinum	202	12' clumped	8094.18	0.19	38
Scirpus microcarpus	1210	6' oc	8094.18	0.19	225
Forbs					
Aster chilensis	303	12' oc	8094.18	0.19	56
Helenium bolanderi	1210	6' clumped	8094.18	0.19	225
Oenanthe sarmentosa	661	8' oc	8094.18	0.19	123
Ferns and Fern Allies					
Polystichum munitum	202	12' clumped	8094.18	0.19	38

Stormwater Swales — Polygons #19, 20, 23

Species	per acre)	Spacing (ft)	Area (sq ft)	Area (acres)	Total
Graminoids					
Camassia quamash ssp. quamash	438	10' clumped	7796.54	0.18	78
Carex densa	4840	3' oc	7796.54	0.18	866
Carex tumulicola	4840	3' oc	7796.54	0.18	866
Deschampsia danthonioides	1742	5' oc	7796.54	0.18	312
Danthonia californica	2723	4' oc	7796.54	0.18	487
Festuca rubra	1210	6' oc	7796.54	0.18	217
Hordeum brachyantherum	2723	4' oc	7796.54	0.18	487
Juncus effusus ssp. *brunneaus*	1742	5' oc	7796.54	0.18	312
Juncus patens	1742	5' oc	7796.54	0.18	312
Juncus phaeocephalus	1210	6' clumped	7796.54	0.18	217
Iris douglasiana/Pacific Coast hybrids	889	7' clumped	7796.54	0.18	159
Lilium pardalinum	303	12' clumped	7796.54	0.18	54
Sisyrinchium bellum	438	10' clumped	7796.54	0.18	78
Forbs					
Aster chilensis	889	7' clumped	7796.54	0.18	159
Limnanthes douglasii	na	seed	7796.54	0.18	na
Linanthus grandiflora	na	seed	7796.54	0.18	na
Ferns and Fern Allies					
Woodwardia fimbriata	681	8' clumped	7796.54	0.18	122

FIGURE 6

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

WSP
WSP ENVIRONMENT & ENERGY
ECOSYSTEM SCIENCE & NATURAL RESOURCES MANAGEMENT SERVICES
160 FRANKLIN STREET STE 300 · OAKLAND · CA 94607 · (510) 208-3715

REGISTERED PROFESSIONAL ENGINEER DANIEL G. McMILLAN No. 35048 Exp. 9-30-2009 CIVIL STATE OF CALIFORNIA

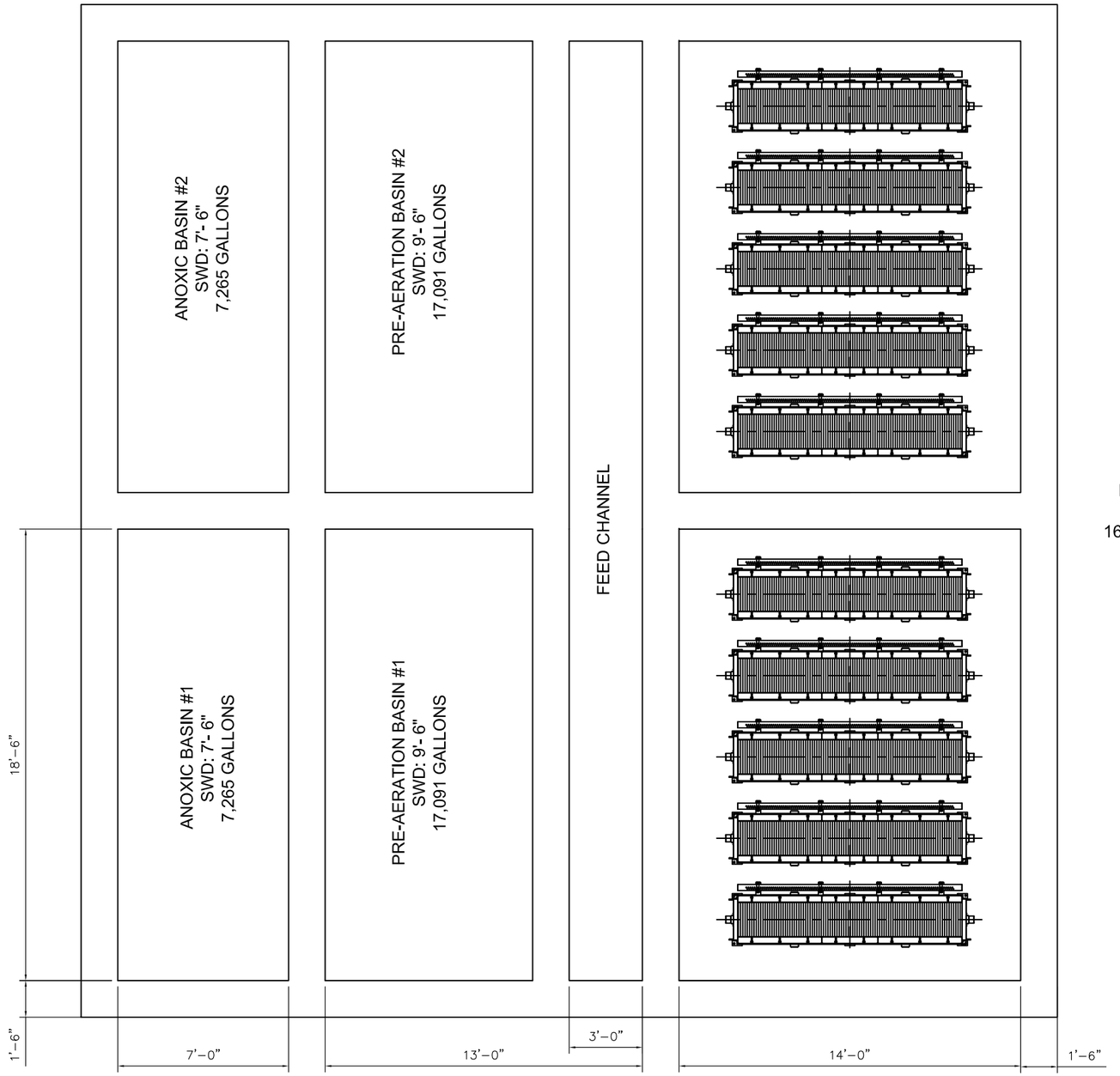
PREPARED FOR:
BIG WAVE LLC

DRAFT PLANTING PLAN

BIG WAVE PLANT TAKE-OFFS
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	STS
DESIGNED BY:	
CHECKED BY:	AKK
SCALE:	
DATE:	8/4/08
DRAWING NO.	
SHEET	

DATE:	DESIGNED BY WSP
7/30/08	



NOTE:
1) During Phase I (0.10 MGD AAF), one of the two trains will be operated. Four (4) ES-200 SMUs and one (1) diffuser case will be installed for Phase I;

2) During Phase II (0.25 MGD AAF), both trains will be operated. Each MBR basin will have five (5) ES-200 SMUs installed.

REVISED Figure III-27

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				
-	-	-	-	-

Enviroquip
a division of Eimco Water Technologies

A GLAV COMPANY

DATE	03/16/2009
DRAWN	KZ
CHECK'D	

HALF MOON BAY WWTP
HALF MOON BAY, CA
MBR BASIN LAYOUT
0.25 MGD (BUILD OUT)

DRAWING SCALE	
JOB NUMBER	-
SHEET	OF
FILE NAME	REV A

Clarification/Correction to Figures

- Figures III-9 and III-16: The line that parallels Airport Street and is labeled "Runway Extension Footprint" has been re-labeled as "Airport Overlay Zone."

- Figure III-9 (Office Park Property Site Plan): (1) Buildings will each be three-stories as described in the DEIR, (2) the transformer will be relocated outside of the wetland buffer zone, (3) there will be no paved roads and/or driveways in the wetland buffer zone, and (4) dumpsters will be relocated next to the commercial buildings.

- Figures III-10 through III-13, III-15, and III-19 (All Building Elevations): Raised grades, wind turbines, and/or solar panels will be included in the height of the proposed structures, as measured from natural grade. Heights of structures will be reduced such that these rooftop features can be accommodated within the proposed maximum heights.

- Figure III-15 (Office Park Property Communications Building): This figure has been deleted because the Communications Building has been relocated to the Wellness Center site and combined with Building A.

- Figure III-21 (Wellness Center Public Storage Building): As the public storage building has been combined with the Wellness Center in Building A, this figure has been deleted.

Minor Universal Changes Throughout the DEIR:

- Total Wellness Center Units: The total number of Wellness Center units has changed from 70 units to 57 units. This change is considered minor, as the occupancy of the Wellness Center has not changed and remains at 50 developmentally disabled adults and 20 staff persons.

- Community Center: All references and descriptions of the "Community Center" have been changed to "Fitness Center," which will be for the use of Wellness Center residents, guests, and staff, and Office Park employees only (not open to the general public).

- Wellness Center Buildings: References to Wellness Center Buildings 1 through 7 have been be replaced with references to Buildings A and B.

- Wellness Center Parking Lot: The 73-space parking lot has been changed to 50 parking spaces, due to the elimination of the Community Center and the associated need for parking for it.

- Wellness Center Wetlands Trail: This trail has been eliminated.

- Public Storage Building: The size of the public storage building has been reduced from 20,000 sq. ft. to 10,000 sq. ft. Also, the public storage building on the Wellness Center parcel is no longer a separate building, as it will be attached to Building A.

- Drainfields/Infiltration Ponds and Rain Gardens: All references to drainfields, infiltration ponds, and rain gardens have been deleted, as these proposals have been eliminated from the project.

- Natural Gas Generator: The purpose of the natural gas generator has changed from peak-shaving to backup uses.

- El Granada Mobile Home Park: All references to the El Granada Mobile Home Park are changed to Pillar Ridge Manufactured Home Community.

Text Changes to Section III (Project Description) of the DEIR:

Page III-2 (Zoning)

The description of the zoning of the project sites has been revised as follows to clarify that portions of the wetland and wetland buffer zone area are zoned Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD), as shown in Figure A of the FEIR.

Northern Parcel: Light Industrial/Design Review/Coastal Development District (M-1/DR/CD)

Light Industrial/Airport Overlay/Design Review/Coastal Development District (M-1/AO/DR/CD)

Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD)

Southern Parcel: Waterfront/Design Review/Coastal Development District (W/DR/CD)

Waterfront/Airport Overlay/Design Review/Coastal Development District (W/AO/DR/CD)

Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD)

Page III-18 (Project Characteristics)

The description of the Wellness Center property is revised to reflect that there is a change in the number of residential units from 70 units to 57 units, that the public storage building is no longer separate, and that the parking lot was reduced from 73 spaces to 50 spaces, as follows:

Wellness Center property (southern parcel) development to be subdivided into three separate lots (Lots 1-3):

- Lot 1 would include a ~~separate~~ 10,000 square-foot storage building attached to Building A ~~(Building 4)~~;

- Lot 2 would include the Wellness Center with a maximum of ~~70~~ 57 units for approximately 50 DD adults and 20 live-in staff members, other on-site living and recreation facilities (Buildings ~~1-3, 5-7~~ A and B), and associated fencing; and

- Lot 3 would include a ~~73~~50-space parking lot.

Pages III-18 and III-19 (Project Characteristics)

The following paragraph revised to add additional clarification and information as follows:

In addition to these above primary components, the proposed project includes: development of an on-site trail system; restoration of wetland habitat; use of sustainable organic, on-site/off-site farming for supplemental food sources; a native plant nursery for revegetation/landscaping efforts; recycling and composting; dog walking and grooming services; and development of bus stops and shuttle services.

Proposed utilities and service systems include: solar cells for heating/energy; carbonate fuel cells; backup natural gas generators; wind turbines and generators; geothermal cooling systems; ~~rain garden~~ infiltration of stormwater through the pervious pavement parking lot~~/treatment ponds~~; options for water systems such as: (1) domestic hookups and one fire system hookup, and (2) use of well water/treatment systems and on-site water storage for fire protection (e.g., pool or below-ground storage tank); options for wastewater systems such as: (1) use of an on-site wastewater treatment plant with disposal through a combination of municipal hookup and on-site recycled water usage~~ irrigation and infiltration~~, and/or (2) municipal hookups; and a Communications Building with two microwave dishes.

Page III-20 (Wellness Center)

The following is added after the first paragraph of this section to provide clarification:

All residents of the Wellness Center will require a professionally diagnosed Developmental Disability (DD) that meets the requirements set by the non-profit Board of Directors. Among other affordable housing, the Wellness Center will also provide housing for residents that live only on their Social Security disability pension (an average income of about $12,000 per year).

Pages III-20 and 21 (Table III-3)

In order to comply with Mitigation Measure CULT-2a, the Wellness Center has been reduced in size from 78,785 sq. ft. to 70,306 sq. ft. As the public storage building has been reduced in size from 20,000 sq. ft. to 10,000 sq. ft. and has been combined with the Wellness Center, floor areas and site coverage for both the Wellness Center and the public storage use have been corrected in the table below. Table III-3 of the DEIR is deleted and replaced with the following:

Revised Table III-3 **Proposed Wellness Center Property Floor Areas and Site Coverage**		
Site Coverage	**Size (Sq. Ft.)**	**Percent**
BUILDING "A"	32,707	14.2%
BUILDING "B"	6,114	2.7%
Parking/Conc. Walk/Decks	43,486	18.9%
Total Site Coverage	**82,307**	**35.8%**[1]
Floor Areas		
BUILDING "A" – 45 Residential Units (Types A, C, D, E and F), Recreational, Public Storage, Communications, Compost Uses	88,648	
First Floor	32,707	
Residential Use	*19,362*	
Public Storage Use	*10,000*	
Compost Uses	*2,000*	
Wellness Center Storage	*1,345*	
Second Floor	27,971	
Residential Use	*25,611*	
Communications	*2,360*	
Third Floor	27,970	
Residential Use	*25,375*	
Communications	*1,640*	
Wellness Center Storage	*955*	
Floor Area By Use		
Residential Use	70,348	
Public Storage Use	10,000	
Communications Use	4,000	
Compost Uses and Wellness Center Storage	4,300	
Building "A" Total	**88,648**	
BUILDING "B" – 12 Residential Breezeway Units (Type B)		
First Floor	6,114	
Building "B" Total	**6,114**	
Total Wellness Center Floor Area	**94,762**	
[1]Garage has been eliminated from Wellness Center site plan shown in FEIR.		

Page III-36 (Apartment Units - Building 1, north and south stack)

Number of Wellness Center units per unit type has been revised to simplify the description of units and maintain consistency with revised Table III-4:

Apartment Units - Building ~~1, north and south stack~~ A

~~These structures~~ Building A would be approximately three stories high, ~~housed within the proposed north and south stacks within Building 1, built around~~ and contain 45 apartment units located adjacent to the proposed Wellness Center common areas. The apartment living would contain housing for up to 50 residents/staff members. The units would be available in four types that vary by size from 300 sq. ft. to 1,287 sq. ft.: (1) a single unit (one-bedroom/bathroom module); (2) a double unit (one bedroom/bath module with separate living room and dining room/kitchen area); (3) a three unit (two - 1 bedroom/bath modules with separate living room/kitchen area); and (4) a four unit (two - 1 bedroom/bath modules, a separate living room (media/sitting area), and a separate kitchen/dining room). ~~The proposed number of abovementioned units would include: 19 single units, 11 double units, 5 triple units, and 2 four units; for a total of 37 units. However, per the applicant, there is the potential to convert the 11 double units into 22 additional single units, and the 2 four units into 2 triple units and 2 single units. This conversion would yield an additional 13 units for a maximum total of 50 apartment units.~~ Overall, these units would be suited for living with attendants or aides. Refer to Figures III-17 and III-18.

Page III-37 (Single-Story Style Units – Breezeway Units)

~~Five~~ Twelve breezeway units would be constructed in Building B.~~from 20 bedroom modules and 4 kitchen modules. The breezeway units would house up to 20 residents/staff aides.~~ The breezeway units would be a shared living space and would be more suited for independent living. Refer to Figure III-20.

Page III-37 (Table III-4)

Due to the reduction in the number of units at the Wellness Center from 70 units to 57 units, Table III-4 of the DEIR is deleted and replaced with the following:

Revised Table III-4
Proposed Wellness Center Residential Component

Unit Type	No. of Unit	Unit Size
A	31	455 sq. ft.
B (Breezeways in Bldg. B)	12	438 sq. ft.
C	4	300 sq. ft.
D	4	444 sq. ft.
E	2	1,287 sq. ft.
F	4	937 sq. ft.
	57 Units	

Page III-38 (Community Center)

The "Community Center" section is renamed to "Fitness Center" and is revised as follows:

The approximately 5,326 sq. ft. ~~"community center"~~ "fitness center" facilities would be located within the central portion of Building A~~1 and south of Building 1 (refer to Figure III-16)~~ and would include a ~~pool (~~25 yard by 32-foot indoor pool~~, located in 3,464 sf Pool Building) and fitness center~~ gym, basketball court and locker rooms. ~~(located in Building 1"south stack"). These community center associated amenities would be available to the Center residents, staff and Coastside public.~~ The use of this facility would be restricted to Big Wave residents and guests, staff and Office Park employees. Parking for office employees will be on the Office Park site. Office Park employees will walk, bike or take public transportation or shuttles to the fitness center. The fitness center will not be available to the general public. Visitation and friend and family use of the Wellness Center will occur in off-peak hours and weekends.

Page III-38 (Storage Facilities)

The "Storage Facilities" section is revised to reduce the size of the storage facilities from 20,000 sq. ft. to 10,000 sq. ft., as follows:

The proposed ~~20,000~~ 10,000 sq. ft. storage facility associated with the Wellness Center would be located within the Half Moon Bay Airport Overlay (AO) setback but outside of the wetlands buffer zone (Lot 1 or Building 4; refer to Figures III-16 and III-21).

Page III-39 (Dog Walking and Pet Grooming)

The following sentence is added to the end of the "Dog Walking and Pet Grooming" section to provide clarification:

This is a service provided only for the office workers who will drop off their pets on the way to work.

Pages III-39 through III-40 (Organization, Programs, Employment Options)

The "Organization, Programs, Employment Options" section is revised as follows to provide clarification:

The Wellness Center would offer its residents a variety of services, including job opportunities due to a number of business operations that would employ residents, and, in some cases, generate revenue to maintain the economic sustainability of the Wellness Center. The Wellness Center Businesses are small businesses operated by the residents of the Wellness Center for the Big Wave Project. The Big Wave businesses are designed to provide extra income to cover the living expenses of Wellness Center residents. This includes the proposed: BW Catering/Food Services; BW Energy; BW Farming; BW Water; BW Transportation; BW Recycling; BW Communications (Fiberlink); and BW Maintenance. The Wellness Center would also provide residential services (personal finance, meal services and aides).

Pages III-39 (Catering/Food Services)

The "Catering/Food Services" section is revised as follows to provide clarification:

BW Catering/Food Services would operate a commercial kitchen that can provide food for up to 70 Wellness Center residents. The same facilities will provided catered meals to the office workers upon order. ~~and lunch service deli within the common area of Building 1 to serve Office Park employees, residents and guests.~~ The meals will be delivered with an electric cart that travels on the Class I bike trail that is being constructed between the Wellness Center and the Office Park. Catered meals beyond the boundaries of the project will be provided by a delivery truck operating in off-peak hours. They would sell BW's free-range chicken, eggs, yogurt and ice cream for use in local restaurants and stores. A weekly Farmer's Market in the Office Park parking lot may occur, as well as the opening of a local sales outlet with organic yogurt and ice cream available. If this is implemented, one of the offices ~~within Building 1~~ next to the kitchen would be utilized for this sales outlet. Additionally, an on-site "BW Store" may be developed, which would serve the residents with basic grocery needs. The store would be located in one of the office spaces or storage spaces within the common area ~~or north stack in Building 1~~. The Catering operation would require one full time dietician and four full time residents of the Wellness Center.

Pages III-40 (BW Energy)

BW Energy would include up to 600 kilowatts (kW) of solar voltaic, one to three million British thermal unit (BTU) per hour of solar heating, one million BTU per hour of geothermal/evaporative cooling, and up to 100 kW of wind power. They would also own and operate natural gas engine generator (up to a 600 kW) designed for backup purposes ~~peak shaving~~ and 5 kW of natural gas fuel cells for backup communications. Maintaining this system would generate four full time jobs for residents at the Wellness Center. Additional details are discussed further in the Utilities and Service Systems Section of the DEIR.

Page III-40 (BW Farming)

The "Big Wave Farming" section is revised as follows to provide clarification:

BW Farming would operate and farm the following: (1) 12 acres of row crops (within an off-site location adjacent to the Half Moon Bay Airport, Airport Street and SR 1; (2) a 5-acre on-site native plant nursery; and (3) an existing 20-acre off-site farm (located on Lobitos Creek Road) which is also not a part of the project. The 12 acres of land proposed for use in row crops would be located immediately east of the Wellness Center property within an existing farm; would be leased by BW; and would produce conventional (organic) produce. Off-site farm activities will occur with a shuttle van during off-peak hours. The native plant nursery would include two on-site 8,000 sq. ft. potting yards where approximately 30,000 pots would be raised outdoors under irrigation (no associated structures); one located in the east corner of the Office Park property and one located in the north east corner of the Wellness Center property. This nursery would continue to supply about 15,000 to 30,000 native plants per year for on-site restoration projects ~~along the coast~~. The 20-acre farm is an existing farming and cattle operation that would be leased by BW and converted to a long-term, sustainable organic farm. This farm would include free-range poultry for organic eggs and fryers; free-range livestock for organic milk, yogurt and ice cream; and hay and vegetable crops. Dairy, poultry and farm produce would be processed

in the commercial kitchen located within Building 1. This operation will be capable of generating up to 5,000 dozen eggs per year; 1,000 pounds of organic free-range chicken; 2,000 gallons of organic milk from free-range cows; 1,000 gallons of organic yogurt; 1,000 gallons of ice cream; and 5 tons of fresh produce. During the week, all farm and processed products, including poultry, eggs, organic milk, yogurt, ice cream, vegetable crops will be used on-site or sold to Office Park employees only. Sales of farm and processed products to members of the public will be restricted to farmer's markets on the weekends. The BW Farming operations would provide potential employment opportunities for the DD residents (approximately 10 residents of the Wellness Center), one farm manager fulltime, as well as 10% of a farmer's time.

Pages III-40 and 41 (Treatment and Recycling)

The "Treatment and Recycling" section has been revised to provide additional details and clarification:

BW Water would operate the potable water distribution, the water recycling system, and irrigation water supply for the Office Park and the Wellness Center properties. The private water distribution system would provide for fire suppression, potable water, recycled water, agricultural well water, wetlands restoration water, and irrigation water. The potable water would either be purchased from Coastside County Water District (CCWD) if available or ~~reverse osmosis (RO)~~ treated well water. The agricultural irrigation would include infiltrated rainwater, agricultural well water, and recycled gray and black water (tertiary treated wastewater). The water system would require a part time operator (800 hours per year) and 4 full time residents. Additional details are discussed further in the Utilities and Service Systems Section of the DEIR. For the operation of the water system, Big Wave will form a Mutual Water Company pursuant to the Public Utilities Code Section 2725 and Corporations Code § 14300. The water system will be subject to review and approval by the County's Environmental Health Division in compliance with the requirements of the State Department of Public Health. Water recycling would comply with the requirements of the Regional Water Quality Control Board.

Page III-41 (BW Transportation)

This section has been revised to add the proposed off-site parking agreement and shuttle to accommodate 50 cars and their drivers:

BW Transportation would provide the following: collecting fees for potential event parking, parking at the Office Park; and bus services for the residents and Office Park commuters. They would also provide transportation to DD residents to off-site events and places of employment, as well as and transport of food and produce to market. BW Transportation may utilize DD residents as employees and its own equipment or use contractors. BW Transportation would require one full time bus driver and 3 full time employees. Prior to occupancy of any Office Park building, the applicant will implement Traffic Demand Management (TDM) measures, including an off-site parking agreement and shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic on Cypress Avenue, Prospect Way, Broadway to Cornell Avenue, Harvard Avenue, and Yale Avenue.

Page III-41 (BW Recycling)

The "BW Recycling" section is revised as follows to provide clarification:

BW Recycling would promote the purchase of recyclable materials and supplies for the Wellness Center and Office Park. They would collect and sort all metal, plastic, glass, and paper recyclables, and compost food and landscape waste. Compost that meets organic standards would also be used in the proposed farming operations. Non-organic compost would be used in landscape operations. The recycling operation would employ a part time manager (300 hours per year) and 4 full time residents. There would be an indoor recycling room in each office building and a recycling facility at the Wellness Center. Composting would occur in an enclosed, indoor area within the Wellness Center.~~the Communications Building for the Office Park.~~

Page III-42 (Office Park Property)

The section titled "Office Park Property" is revised as follows to remove the wetlands trail on the Wellness Center property and to extend the Class 1 trail along both project sites):

As shown in Figure III-9, there are three walkways/trails proposed for development within the Office Park property, including: (1) a portion of the multi-purpose bike/pedestrian trail proposed to run along Airport Street (extending from the Office Park property to the Wellness Center property); (2) a proposed wetlands trail for viewing restored wetland areas; and (3) a "North Trail" which would run along the northern portion of the property connecting to the wetlands trail. The proposed wetlands trails would be approximately 24,000 sq. ft. (1,200 feet long and 20 feet wide). The Airport Street Class 1 multi-purpose trail would be ~~14,000~~ 17,000 sq. ft. (including the portions in front of the Wellness Center and Office Park properties~~y~~) or 1,700 feet long and ~~8~~10 feet wide. The ~~North T~~trail along the northern boundary of the Office Park site would be 15,000 sq. ft. ~~(including the roughly 50 sf area located to the west of the Mobile Home Park)~~ or 750 feet long and 20 feet wide. All trails within the Office Park area would be designed to be Americans with Disabilities Act (ADA) compliant. The proposed trails within the Office Park property would be available to the public and would be paved with porous concrete.

Revised Table III-5
Office Park and Wellness Center Properties Proposed Walkways/Trails

Type	**Size (sf)**
Office Park Property	
Multi-purpose Walkway/Trail (Airport Street)	~~14,000~~ **11,800**
Wetlands Trail	24,000
North Trail leading to Headlands	15,000
Subtotal	~~53,000~~ **50,800**
Wellness Center Property	
Multi-purpose Walkway/Trail (Airport Street, portion included above)	5,200
~~Wetlands Trail~~	~~18,000~~
Subtotal	~~18,000~~ **5,200**
Total Walkways/Trails	~~71,000 (or 1.6 acres)~~ **56,000 (or 1.3 acres)**

Notes: sf = square feet.
Source: Big Wave, LLC, Facilities Plan: Draft #2, Big Wave Property, January 2009.

Pages III-42 and 43 (Wellness Center Property)

The section is revised as follows to remove the wetlands trail on the Wellness Center property:

As shown in Figure III-16, there ~~are two~~ is one walkway~~s~~/trail~~s~~ proposed for development within the Wellness Center property, ~~including: (1)~~ a portion of the multi-purpose bike/pedestrian trail proposed to run along Airport Street (extending from the Office Park property to the Wellness Center property, mentioned above)~~.; and (2) a trail along the edge of the Wellness Center allowing for access to the wetland restoration areas. These~~ This on-site walkway~~s~~/trail~~s~~ would allow pedestrian and wheelchair access between the proposed Wellness Center and the Office Park properties. ~~The wetlands trail would be designed to be ADA compliant and would be approximately 18,000 sf (900 feet long and 20 feet wide). The trail would be paved with porous concrete for wheel chair accessibility and would provide fire access to both sides of all proposed buildings on the site. The proposed wetlands trail within the Wellness Center Property would be private, while all other trails would be available to the public.~~

Page III-43 (New Section: Outdoor Signage)

An additional section titled "Outdoor Signage" has been added between the sections "On-site Walkways/Trails" and "Recreation" to provide clarification:

The applicant will post signs throughout the Wellness Center and Office Park properties to remind cat and dog owners and caretakers to restrict animals to allowed areas per Mitigation Measure BIO-4a and to pick up any animal waste.

Page III-43 (Recreation)

The "Recreation" section is revised as follows to provide clarification:

As discussed above in the Wellness Center Facilities discussion, on-site recreational opportunities include a basketball court, movies, multi-purpose rooms, indoor swimming pool and fitness center for use by the on-site residents, their guests, ~~and~~ staff and Office Park employees only. ~~The Community Center facilities would include the pool, fitness center and locker rooms, which would be available to the public as well.~~

Page III-43 (Restoration)

The section is revised as follows to reflect wetlands restoration over 44%, not 47%, of the total site, consistent with revised Table III-6:

The proposed project includes approximately 9 acres of wetlands restoration through the use of vegetation supplied by the proposed on-site native plant nursery. Nurseries are temporary because they will be relocated out of areas intended for wetlands restoration and restoration will not occur until construction is complete. The first generation of plants from the two on-site 8,000 sq. ft. nursery sites would be used to restore the property. All planting within jurisdictional waters would be done by hand with no mechanical grading. Per the restoration plans, ~~47~~ 44% of the total project site would be restored to native California wetlands. The proposed project would also establish a minimum of 100 feet of restored buffer from the

boundary of delineated LCP Wetlands. The project design includes planting the abovementioned buffer as a riparian corridor and uplands coastal scrub/shrub. The total acreage of this planted buffer would be between 4 to 5 acres. No alteration or disturbance of stream beds or channel banks within the jurisdiction of the California Department of Fish and Game (CDFG) and the USACOE is proposed. The existing drainage swale, which separates the northern and southern parcels, would be maintained. A tabulation of areas proposed for restoration for both the Office Park and Wellness Center properties is included below (refer to Table III-6 and Figures III-23 and III-24, respectively).

Page III-44 (Table III-6)

Table III-6 has been updated per the revised Wellness Center site plan and to remove consideration of the North Trail as wetlands restoration:

Revised Table III-6
Office Park and Wellness Center Properties
Proposed Wetlands Restoration Site Coverage

Type	**Size (sf, %)**
Office Park Property	
Restored Wetlands	226,038
Wetlands Access Trail	24,000 (~~39,000~~)
Native Plant Nursery (temporary and permanent)	8,000
Total Wetlands Restoration (includes temporary)	**258,038** (~~273,038~~)
Northern Parcel Area	620,841
Percent Wetlands Restoration	***41.6%*** *(~~44%~~)*
Wellness Center Property	
Restored Wetlands	114,749 ~~96,749~~
~~Wetlands Access Trail~~	~~18,000~~
Native Plant Nursery (temporary and permanent)	8,000
Total Wetlands Restoration (includes temporary)	**122,749**
Southern Parcel Area	*229,779*
Percent Wetlands Restoration	***53%***
Overall Total Wetlands Restoration (both parcels)	**380,787** (~~395,787~~)
Total Parcel Area (both parcels)	850,620
Percent Wetlands Restoration (both parcels)	***44.8%*** *(~~47%~~)*
Notes: sf = square feet. *Source: Big Wave, LLC, Facilities Plan: Draft #2, Big Wave Property, January* 2009.	

Page III-47 (Office Park Property)

This section is revised as follows to be consistent with revised Table III-6 (above):

As shown in Table III-6, approximately 6.1 acres of permanent wetlands would be restored within the Office Park property, including the proposed wetlands trail and ~~North T~~trail along the northern boundary of the Office Park site. With the addition of the temporary native plant nursery (8,000 sq. ft.), a total of ~~6.3~~ 5.9 acres would be restored. Overall, for the 14.25-acre northern parcel, approximately ~~44~~ 41.6% of the site would be restored and maintained as native wetlands under the proposed project (refer to Figure III-23).

Page III-47 (Wellness Center Property)

The proposed wetlands restoration plan for the Wellness Center property is provided on Figure III-24. The southern parcel is approximately 5.28 acres. Per Table III-6, approximately 2.6 acres of ~~restored~~ wetlands ~~and wetland access trails (utilizing native plants and porous concrete)~~ would be restored within this property, with up to 2.8 acres total with the incorporation of the on-site 8,000 sq. ft. native plant nursery. The total portion of the Wellness Center property that would be restored as wetlands under the proposed project would be approximately 53%. Figure III-24 also illustrates the proposed expansion of the wetlands and riparian zone of the Pillar Point Marsh into the abovementioned buffer zone and onto the Wellness Center property. The building foundations would also provide a ~~3~~4-foot-tall hard edge provided by foundation walls to the wetlands restoration. The native riparian plants associated with wetlands restoration would blend into the edge of the proposed buildings.

Page III-47 (Landscaping)

The "Landscaping" section is revised as follows to provide clarification:

Additional proposed ornamental landscaping for the Office Park and Wellness Center properties is shown on Figures III-23 and 24. All plantings would be climate and drought tolerant, native, biologically sensitive, and non-invasive. Landscaping would also be used to treat stormwater and would not require water or maintenance once mature. There would be no permanent landscape irrigation unless it would be with recycled water (see Utilities and Service Systems discussion below). All planting to the west of the Wellness Center and southwest of the Office Park and surrounding the buildings would be designed and installed in accordance with the restoration plan. All landscaping to the east of the buildings and along Airport Street would include extensive planting of California Big Leaf Maple, Live Oak, Madrone, California Buckeye, and Red Alders, with an understory of native grass and a perennial wildflower mix. Trees will be selected so as to block the views of the proposed buildings and will be maintained so as to not block the sun to the single-story homes on the northern side.

Page III-48 (Lighting)

The following sentences have been added to the end of the "Lighting" section to provide clarification:

All buildings will have low-emittance windows. The business park will have tinted windows to reduce light impacts from nighttime use of the buildings.

Page III-48 (Parking)

Add the following to the end of the project description of parking for the Office Park:

Prior to occupancy of any Office Park building, the applicant will implement Traffic Demand Management (TDM) measures, including an off-site parking agreement and shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic on Cypress Avenue, Prospect Way, Broadway to Cornell Avenue, Harvard Avenue, and Yale Avenue.

Page III-49 (Table III-7)

Table IV.M-9 on page IV.M-39 of the DEIR represents a conservative application of the County parking requirements for the mixed-use Office Park. The table below shows that, based on County parking requirements for office use (1 parking space for every 200 sq. ft.), a total of 737 parking spaces would be required. This represents the "upper limit" of the parking required by the County for the mixed-use Office Park. County Parking Regulations set different parking space requirements for "office" uses and "other uses permitted in the 'M' Zoning Districts." These other uses require less parking than office space and, on the basis of the assumption regarding the mix of uses at the Office Park, the County determined that the lower range of required parking for the mixed-use office use would be 518 parking spaces. Staff has concluded that the demand for parking at the site is likely to be in between 518 and 737 parking spaces, which averages at 628 parking spaces. Table III-7 is revised as follows:

Revised Table III-7
Office Park Required Parking Spaces

Proposed Use	**Area (%)**	**Area (sf)**	~~**Equivalent Office Space (sf)**~~	**Parking Spaces Required under M-1 District**[1]	**Parking Spaces Required (200 sf/office space)**	~~**Parking Exception (250 sf/space)**~~
General Office	40%	90,000	~~90,000~~	450.00	450	~~360~~
Research and Development	25%	56,250	~~41,625~~	28.26	208	~~167~~
Light Manufacturing	20%	45,000	~~11,138~~	22.50	0	~~45~~
Storage Uses	15%	33,750	~~15,750~~	16.88	79	~~63~~
		225,000	~~**158,513**~~	517.64	737	~~635~~
Lower Limit of Required Parking Spaces (County):						**518**
Upper Limit of Required Parking Spaces (DEIR):						**737**
Average of Above:						**628**
Total Proposed Parking Spaces:						**640**

[1]The Parking Regulations require "1 space for each 2 employees on largest shift; in no case less than 1 space for each 2,000 sq. ft. of floor area" for all uses which are permitted in "M" Districts, but not specifically enumerated in the regulations.

Page III-49 (Parking Options)

This section is revised as follows be consistent with revised Table III-7, above:

As described above, the applicant is requesting a parking exception from the County for the Office Park Development, if one is needed, based on a possible shortage of 97 parking spaces, where the applicant proposes to provide 640 spaces of 737 potentially required spaces. The calculation of the 737 parking spaces is considered the "upper limit" of required parking where research and development, storage and manufacturing uses are considered office uses. These other uses require less parking than office space and, on the basis of the assumption regarding the mix of uses at the Office Park, the County determined that the lower range of required parking for the mixed-use office use would be 518 parking spaces (calculated based on parking requirements for all uses which are permitted in "M" Districts, but not specifically enumerated in the parking regulations). The demand for parking at the site is likely to be in between 518 and 737 parking spaces, which averages at 628 parking spaces. The County may agree to accept the proposed 640 parking spaces as conforming to this average. ~~reduce the number of required parking spaces to one space for every 250 sf of office space equivalent.~~ The applicant may implement the following parking options in order to further reduce any parking impacts from the proposed project. ~~parking exception (refer to Section IV.M, Transportation/Traffic for a detailed discussion).~~

Page III-54 (Utilities and Service Systems)

The sentence under the "Utilities and Service Systems" section is revised as follows for clarification:

The proposed utilities and service systems (servicing the project sites only) are discussed in detail below (refer to Figures III-25, III-26 and III-27 for more details regarding proposed site utility infrastructure):

Page III-54 (Wastewater)

The "Wastewater" section is revised as follows:

The proposed project would recycle all wastewater, through on-site treatment/water recycling and for use in toilet flushing and landscaping and agricultural irrigation. All excess wastewater not recycled for irrigation ~~or,~~ toilet flushing, or surface and solar panel washdown would be ~~infiltrated through three drainfields and discharged into the on-site~~ disposed of through the Granada Sanitary District (GSD) system through a connection purchased for emergency and excess discharge. GSD is currently assessing the project for eight EDU connections. The connection will be at the new manhole on Airport Street. The flow into the GSD system will be limited by water recycling, flow equalization and metered for compliance with the connection requirements ~~wastewater infiltration system~~. During drought periods, the project proposes to ration water by reducing agricultural irrigation. ~~and would send the majority of the recycled water to the infiltration drainfields for groundwater recharge. A wastewater system and treatment alternative include connection to Granada Sanitary District for the discharge and treatment of sewage and sludge through the~~ The project sites would be connected to the Granada Sanitary District main located at the intersection of Airport Street and Stanford Avenue or a direct connection to the Princeton Pump Station located on West Point Avenue, north of Stanford Avenue.

Pages III-54 and 55 (On-site Treatment/Water Recycling)

The wastewater plant was relocated and revised to comply with Mitigation Measures CULT-2 (avoidance of cultural site), UTIL-4 (providing 100% storage of daily influent and effluent), and UTIL-6 (providing creek crossing). The single "Wastewater Treatment Plant" described in the DEIR was separated into smaller plants of the same total capacity in order to better suit the phased construction of Office Park buildings. The "Wastewater Treatment Plant" section is revised as follows:

Waster Treatment Plant

The proposed project includes the development of ~~an~~ three (3) on-site separate, small Membrane Bioreactor (MBR) wastewater treatment plants ("MBR plants"), in separate locations to serve all project buildings for treatment of wastewater (both black and grey) produced on-site. Recycled water will comply with Title 22 for unrestricted reuse. The water recycling system will incorporate extended aeration, oxic and anoxic zones for nitrogen and phosphorus removal, membrane filtration and UV disinfection. ~~This system would be located at the southern corner of the Wellness Center site and~~ Each MBR plant would ~~include a site specific engineered plant, to~~ be constructed on-site and designed for anticipated operating conditions. Since Office Park building construction would be phased, a separate water recycling system will be sized for each permitted project and each individual owner. Each water recycling system will require approvals from the RWQCB, the County Environmental Health Division and State Environmental Health as part of the permitting process.

Recycled water will be used within the buildings for toilet flushing and outdoors for wash down of the solar panels and other surfaces. Recycled water not used for in building use will be used for wetlands restoration, organic farming and visual landscape screening and sound control. All irrigation will be subsurface drip.

The proposed wastewater treatment system for the project would consist of four primary components (refer to Figures III-25 through 27):

- Sewage collection system consisting of pipes;
- Treatment system consisting of an MBR, ultraviolet (UV)-disinfected tertiary wastewater treatment plant (with 24-hour storage tanks) and sludge treatment/handling facilities, designed to satisfy, at a minimum, state Title 22 standards for application ~~of treated wastewater~~;
- Recycled water distribution for toilet flushing and irrigation;
- ~~Treated wastewater d~~Distribution system and a storage tank for operational and wet weather storage of treated wastewater; and
- Treated wastewater disposal to GSD municipal collection system.~~through a combination of toilet flushing uses, via a subsurface drip emitter infiltration system for agricultural and landscaping irrigation uses, as well as through infiltration via three drainfields~~.

Water Supply

Proposed domestic water supply for the project would be obtained through the generation of treated water on-site via existing groundwater wells, and through the CCWD as an emergency backup. ~~Water for fire flow would be obtained from CCWD and water generated on site.~~ Under a secondary option, the project proposes to annex to CCWD for domestic water and fire flow services, pending approval by LAFCo and approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project. Under this scenario, the property owner would provide CCWD with the on-site water facilities to increase CCWD's domestic water supply, provided that the approvals necessary to allow for this transfer are obtained.

An on-site water distribution system would also be provided under the project (refer to Figures III-25 and III-26). The potable water supply would include a 6-inch waterline distribution system. This system would distribute water from the CCWD or distribute treated groundwater for potable use. Recycled water would be distributed in a 6-inch waterline for irrigation and/or toilet flushing. Reduced pressure backflow preventers would be provided for all potable and CCWD connections. The potable water system for each building in the Office Park (and the cluster of buildings in the Wellness Center) would be fed by 5/8-inch metered waterlines to six buried 10,000-gallon storage tanks with redundant booster pumps for each building complex. The storage tanks would minimize potable flow requirements to reduce the meter sizes or reduce the size of the water treatment facilities.

Water for fire flow would be achieved using one of the following options:

1. On-site water storage for fire protection: On-site water storage would involve the Wellness Center swimming pool, with submersible pump well, or below-ground water storage tank (capacity up to 180,000 gallons as required by Coastside County Fire Protection District at the building permit stage).

2. Combination of On-site Water Storage and Water Connection for Fire Service only: The system includes an emergency connection to CCWD that can be energized through a valve with a reduced pressure backflow preventer and meter if the on-site fire system has problems or is inadequate.

3. Water Connection for Domestic and Emergency Service: This option would rely entirely upon a municipal water connection, if and when a connection is available, for both domestic and fire suppression purposes.

~~CCWD would provide fire service water, with the proposed indoor swimming pool storage serving as backup fire service water.~~ The on-site fire water suppression system would be designed by a licensed Fire Suppression Engineer. Booster pumps in a pump well located in the parking lot and directly powered from an emergency generator would be designed to provide supplemental fire flow. This system would provide either primary or secondary fire flow under options 1 or 2, as described above.

~~The abovementioned water supply system options are discussed in detail below:~~

Page III-55 (New Section: Water Recycling)

The following section has been added after the "Wastewater Treatment Plant" subsection of the "On-site Treatment/Waster Recycling" section:

Recycling water within the building reduces the total water demand for building use by 9,000 to 16,000 gallons per day. The water recycling system is comprised of a Membrane Bioreactor (MBR) with Ultraviolet Disinfection, 24 hours of influent and effluent storage provided for each building. Recycled water will comply with Title 22 for unrestricted use. Recycled water will be used for in-building toilet flushing, solar panel and surface washing.

Recycled water will be used for landscape irrigation, wetlands restoration and organic farming. All recycled water for irrigation will be applied via subsurface drip irrigation. The water recycling system is designed to recycle and utilize all of the potable water extracted with the well. Any excess treated wastewater or water not meeting Title 22 will be discharged into the GSD sewer system, as described previously.

The water recycling system will be comprised of a pressurized 6-inch pipe as shown on the tentative subdivision drawing. The storage capacity of the on-site recycled water storage tank provides additional flexibility for the use and storage of excess treated wastewater. At peak development, there will be approximately 40,000 gallons of recycled water storage on-site in interconnected 6,000-gallon buried tanks. Water storage capacity is divided among the following uses:

- The lower 10,000 gallons (first priority) of storage is reserved for toilet flushing and surface and building wash down. Pumps and valves for toilet flushing will open at the bottom level of the storage system and shut off when there is no demand.

- The next 10,000 gallons per day (second priority) will be reserved for organic farming during the summer only. Pumps and valves open at the 10,000-gallon level and shut off in the rainy season or when there is no demand.

- The remaining 20,000 gallons of storage will be reserved for wetlands and uplands restoration. Pumps and valves open when the storage tank exceeds 20,000 gallons.

When the recycled water volume exceeds 40,000 gallons, it will spill over into the GSD system. It should be noted that the influent storage before the recycled system will be 24,000 gallons. The influent storage tanks will be operated normally empty with all sewage flowing to the recycling systems.

On-site Irrigation Using Recycled Water:

Table III-6 of the DEIR shows approximately 44% of the site in restored wetlands. On-site wetlands restoration and habitat created by landscaping is described in Figure 6 (Planting Plan) of the DEIR and the "90% Basis of Design - Riparian and Water/Wetlands Ecosystem Restoration" added to Appendix E of the DEIR. Approximately 39,000 plants are to be installed over both of the project sites. Of this number, approximately 9,500 are wetlands trees. These numbers include additional landscaping over the uplands of the properties proposed by the applicant after the release of the DEIR, consisting of approximately 4,000 trees and about 6,000 shrubs, to provide additional wetlands habitat and uplands restoration, to act as a visual and noise buffer, and to act as a tsunami barrier. [2]

The uplands will be planted in a manner to require a minimum of 11,000 gallons per day and will be watered with a minimum of 6 circuits for a water cycle once every 6 days to allow drainage. The drip irrigation system is designed to provide water in circuits to saturate the soil but not flood the soil. The

[2] *"When development is to be sited within a tsunami hazard area, the physical configuration of structures and uses on a site can reduce potential loss of life and property damage. This includes the strategic location of structures and open space areas, interaction of uses and landforms, design of landscaping, and the erection of barriers" (Designing for Tsunamis: Seven Principles for Planning and Designing for Tsunami Hazards, March 2001, National Tsunami Hazard Mitigation Program, pg.21).*

primary watering for trees and shrubs will occur in the first phase of construction. After the wetlands restoration is completed (5 to 15 years), the majority of the watering of the uplands will occur during the wet season to add nutrients to the soil, stimulate root growth and provide for foliage for perennials.

Pages III-55 and 56 (Well Water)

The "Well Water" section is revised as follows:

The project site currently operates a well for agricultural irrigation and would continue to do so during phased establishment of ~~under~~ the proposed project, as well as to supply (as needed) water for the native plant nursery, the wetlands restoration, the startup ornamental landscaping, ~~toilet flushing,~~ cooling and domestic supply during normal rainfall years. The well may also provide toilet-flushing water prior to reclamation and agricultural reuse. Utilizing this well domestically would require a Coastal Development Permit and compliance with County and State Public Health Standards. All water pumped from the ground would be used~~,~~ and recycled (providing irrigation for food crops)~~ and then returned into the ground~~.

Domestic well water would be treated with ~~membrane~~ aeration and slow sand micro filtration ~~followed by~~ UV light disinfection. ~~For well water treatment, a two 10,000 gpd AMPAC RO system would be utilized followed by Trojan UV light disinfection. The reverse osmosis (RO) system would be located in one Storage Mechanical room on the first floor of the Wellness Center (Building 1) and in the Communications Building for the Office Park.~~ For redundancy, the systems would be interconnected as outlined in Figures III-25 and III-26. A storage tank designed to meet the peak demand would be installed in each building.~~downstream of the RO system. The RO system would be implemented in two stages. The RO water treatment systems would be fully automatic with continuous turbidity readings and alarmed shutdown.~~

Development of the water distribution system will be phased to match the demand for the office buildings. The water system will be operated by a mutual water company. This mutual water company is subject to County Department of Health review and approval prior to recordation of a final map. Each structure will be constructed under a separate building permit and provide a functional water and wastewater system. The project will conform with the community water supply regulations as outlined by the State and required by the County Subdivision Ordinance and other County regulations. The project will comply with all requirements of the California Safe Drinking Water Act. The project will actively pursue connection to a municipal water district and will connect if and when a connection becomes available.

The project well will have 12,000 gallons of storage and an on-site iron and manganese removal system. There will be no infiltration of recycled water within 100 feet of the well. A 12-inch clay cap will separate the rainwater parking lot infiltration system from the well. The clay cap will extend 100 feet from the edge of the well. Rainwater and parking lot infiltration will be down gradient from the well.

Each building and owner will provide their own in-building distribution system that will include a 5/8 water meter, reduced pressure backflow preventer, filtration system, 6000 gallon storage tank, booster pumps for on demand use and a circulating UV disinfection system. The building hookups will be 1 inch

with a 5/8 inch meter. The filtration system will be designed to provide potable water meeting the specific quality requirements of the user.

Buildings with solar heating may also provide hot water storage with circulating UV disinfection. The Mutual Water Company will operate all the water systems in accordance with County and State requirements. The designed water system will be identical for supply from the well or supply from a Water District.

Page III-57 (Solar Heating/Geothermal Cooling)

The first sentence under the section Solar Heating/Geothermal Cooling is revised for clarification as follows:

Buildings would be heated by ~~either natural gas or~~ solar power under the proposed project.

Page III-57 (Photovoltaic Solar Electrical Power)

Add the following sentence to the end of the "Photovoltaic Solar Electrical Power" section:

An anti-glare, anti-reflective surface would be used on all solar panels in order to minimize glare and reflection from the panels.

Page III-58 (Natural Gas Backup Power and Cogeneration)

Emergency power would be provided by a 600 kW natural gas engine generator. If permitted by the Bay Area Air Quality Management District (BAAQMD), the engine would provide backup power ~~peak power shaving~~ during times when utility power is scarce. ~~The engine would also provide building heat.~~ Refer to Figures III-9 and III-15. Heat exchanges would heat the hot water storage tanks for building heat when solar heat is insufficient.

Pages III-58 and 59 (Drainage)

The "Drainage" section is amended as follows:

The ground water infiltration system consists of the Wellness Center and Office Park pervious surface parking lots.

The proposed groundwater recharge system would function as the stormwater control system with gradual infiltration of between 14 and 20 acre-feet of rainwater per year and biological treatment. The system ~~and~~ would be designed to capture and treat 80% of the surface water runoff (refer to Figures III-25 and III-26). To maximize groundwater recharge, surface water runoff would be minimized. To minimize hard surface runoff, all roof and parking surface water would be collected and treated in the ~~a "rainwater garden"~~ infiltration system. ~~These systems would allow approximately 50 percent of the rainwater to infiltrate and 30 percent of the rainwater to dissipate through evapotranspiration. The proposed permeable concrete walkways and parking lots within the Office Park and Wellness Center properties~~

~~would infiltrate 80 percent of the rainwater. Stormwater exceeding this amount would be captured in catch basins and piped into constructed wetlands for biological treatment and sediment removal.~~

The proposed stormwater system maintenance plan would include:

- Monthly inspection of all components,
- Annual weeding and trash/debris removal,
- Annual replanting of the rainwater gardens and restored wetlands,
- Bi-annual cleaning of storm drain catch basins,
- Bi-monthly vacuuming the parking lot, and
- Daily trash pickup in the parking lots.

The total project would have approximately 3 acres of impervious surface area and 9.5 acres of pervious parking lots and walkways that are designed for groundwater infiltration. The remaining 9 acres would be restored wetlands, organic gardens, and native plant landscaped areas that ~~is~~ are also considered pervious surface. Only ~~10~~ 15% of the total site coverage is impervious surface.

Page III-59 (New Section: Fire Supply)

Add a new subsection titled "Fire Supply" within the "Emergency Services" section of the Project Description to add the following details:

The proposed fire supply and building permits will be subject to the approval of the Coastside Fire Protection District. The fire supply will be distributed to a hydrant system through a 12-inch ductile iron pipe to the hydrant and sprinkler system. The Wellness Center swimming pool will be sized to provide the recommended storage volume. A booster pump system powered by an emergency power system will provide the required flow and pressure. The Wellness Center will provide a separate buried tank for fire system storage if required.

Page III-59 (New Section: Emergency Evacuation)

Add a new subsection titled "Emergency Evacuation" within the "Emergency Services" section of the Project Description to add the following details:

Big Wave will coordinate evacuation with the County Sheriff's Office of Emergency Services and Homeland Security (OES). Big Wave will connect to the TENS system and SMC Alert. Big Wave will purchase EAS radio(s) and provide automatic broadcasting. Big Wave will integrate its PA and fire alarm system into the SMC alert system.

The Tsunami Evacuation Plan will be submitted to County OES for review and approval and will include a planned and organized evacuation by foot to a zone located approximately 2,500 feet to the north that is outside of the current evacuation zone. The applicant will conduct biannual evacuation training exercises

to respond to both local source and distance source tsunami scenarios. During these exercises, supplies will be brought to enable a comfortable and safe place within the evacuation zone until the return order is given. All equipment will be preloaded in hand carts. Longer-term evacuation will be staged in an orderly manner from this zone. The same type of evacuation will be exercised for fire and major earthquakes.

All project structures will be designed for vertical evacuation. All buildings are pier-supported steel structures with wave energy dissipation. The second floor of the structures would exceed the height of the inundation zone. The office buildings will be designed to comply with FEMA P646/June 2008 and all evacuations will be vertical. The Wellness Center will also be designed for this standard, but will evacuate by foot to the designated zone to plan for a combined fire or tsunami evacuation.

Pages III-59 and 60 (Grading)

Revise "Grading" section under "Construction Considerations" section in order to factor in reduced grading for pervious parking lot around the well and more grading for fire water storage tank. At the Office Park, estimated excavation for the pervious surface parking lot will decrease by approximately 800 cubic yards due to the County Environmental Health Division requirement to retain the clay cap within a 100-foot radius of the well. This also reduces the amount of imported gravel. At the Wellness Center, about 500 cubic yards of additional excavating may be necessary for a below-ground fire storage tank. It should be noted that total cut and fill amounts for the project have been reduced. The grading summary shown on page III-59 is revised as follows and a new table has been added to provide additional clarity:

Grading

The total area to be graded for the Office Park property would be approximately 9 acres for buildings, walkways and the parking lots (refer to Figure III-25). The total project would be designed to import ~~4,100~~ 3,605 cubic yards (cy) of gravel for the infiltration system. No soil would be imported or exported, with grading to be balanced on-site. The Office Park property cut would include ~~21,875~~ 21,075 cy with fill of ~~15,780~~ 14,980 cy, and export of 6,095 cy to the Wellness Center property. The Wellness Center property would include cut of ~~870~~ 1,370 cy and an import of 6,095 cy from the Office Park property. The ~~4,105~~ 3,605 cy balance would include imported gravel. The total area to be graded on the Wellness Center property is 2.6 acres for buildings, walkways and parking lots (refer to Figure III-26). The wetlands area (currently under farming and not within jurisdictional waters) would be graded as part of the wetlands restoration plan. The project was specifically designed to avoid impacts to Federally Jurisdictional Wetlands with the exception of allowable hand planting and weeding in jurisdictional areas. Additionally, grading for development would avoid jurisdictional wetlands, and waters of the United States. Grading within the 100-foot buffer from the drainage swale (the boundary of delineated State Wetlands, which bisects the project site), would only be for wetlands restoration and in accordance with the restoration plan.

New Table III-9 Grading Estimates			
Purpose	**Cut**	**Fill**	**Import**
Office Park			
Excavate Top Soil and Stockpile On-site	18,700[1] ~~19,500~~		
Building Pads		7,740	
Parking Lot		5,370[4] ~~6,170~~	3,605[4] ~~4,100~~ (imported gravel)
Swale and Retention Ponds[2]	2,375	1,870	
Office Park Total	***21,075*** ***~~21,875~~***	14,980[4] ***~~15,780~~***	
Wellness Center			
Swale and Retention Ponds	870		
Building Pads, Fire Trail and Parking		11,070	6,095 cy from the Office Park property
Fire Water Storage Tank	500[3]		
Wellness Center Total	***1,370*** ***~~870~~***	***11,070***	
TOTAL CUT AND FILL	***22,445 (formerly 22,745)***	***26,050 (formerly 26,850)***	(3,605 cy gravel will be imported)

[1] Reduction of 800 cy of cut due to the County Environmental Health Division's requirement to retain the clay cap within a 100-foot radius around the well.
[2] The swales and retention ponds are for the purpose of providing natural roughness and topography and micro and macro depressions in the wetlands design.
[3] Additional excavation to install a below-ground water storage tank for fire protection, if swimming pool is not approved as fire supply by the Coastside County Fire Protection District.
[4]Revised and reduced fill amount based on reduction in cut amount (see note 1 of this table) to allow for balanced grading.

Page III-60 (Phasing and Schedule)

The "Phasing and Schedule" section has been deleted and replaced with the following to provide for clarification:

Three possible construction scenarios are summarized below:

- 3-Year Office Park Completion Timeframe: Assumes high demand for mixed office space, and concurrent construction of all four buildings. Buildings are completed within a 3-year timeframe, with high noise levels but over a shorter duration than in other scenarios.

- 20-Year Office Park Completion Timeframe: Assumes low demand for mixed office space, and non-concurrent, non-continuous construction of the four buildings over an extended period, in which each building is constructed separately with gaps of months or years in between construction of each building. Buildings are completed within a 20-year timeframe, with lower noise levels during construction, no noise during gaps in construction, over a much longer duration.

- 7.4-Year Wellness Center and Office Park Completion Timeframe: Assumes lower demand for mixed office space than in the 3-year scenario, but enough demand to warrant non-

concurrent, continuous construction, in which each building is constructed separately with no gaps in between construction of each building. Buildings are completed within a 7.4-year timeframe, with lower noise levels in the short-term, but extended over a longer duration.

Revised Table IV.J-11 of DEIR
Construction Schedule and Equipment

Activity	**3-Year Scenario* (Schedule in Months)**	**7.4-Year Scenario (Schedule in Months)**
Initial Grading/Material Sorting	0.75 months (3 weeks)	0.75 months (3 weeks)
Utilities Installation	1 month	1 month
Foundation Construction	2 months	8 months
Wellness Center	30 months	30 months
Office Park: Building A		12 months
Office Park: Building B		12 months
Office Park: Building C		12 months
Office Park: Building D		12 months
Permeable Parking Lot/Fire Trails	0.75 months (3 weeks)	0.75 months (3 weeks)
Total Time Frame: Office Park Only	**N/A**	**48 (4 years)**
Total Time Frame: Office Park and Wellness Center	**34.5 months (2.9 years)**	**88.5 (7.4 years)**

*From Table IV.J-11 of DEIR

Note: The 20-Year timeframe is not represented in this table. The purpose of this table is to show how construction would progress and how long it would take under continuous concurrent (3-year) and non-concurrent (7.4-year) processes. The 20-year scenario represents a non-concurrent, non-continuous construction process that would include gaps of months or years in between the construction of each building. Essentially, the schedule provided under the 7.4 year scenario could be utilized under the 20-year scenario, with added gaps of months or years in between the construction of each building, such that full project construction is extended over 20 years.

Page III-60 (New Section: Design for Tsunami, Sea Level and Flood Hazard)

Add a new subsection titled "Design for Tsunami, Sea Level and Flood Hazard" to the end of the "Construction Considerations" section of the Project Description, to provide the following additional details:

1. First floor elevations of Wellness Center Buildings were raised from 18 feet to 20 feet NGVD, which is above the estimated maximum elevations accounting for a 100-year flood event, sea level rise and tsunami inundation.[3]

[3] *Project elevations are based on a Base Flood Elevation (BFE) of 8.5 feet NGVD, (refer to pages IV.H-17 and 18 and Figure IV.H-6 of the DEIR), a maximum recorded wave run-up elevation of 14.35 feet NGVD in 273 years, and a highest projected sea level rise over the next century of 5 feet from the current mean high tide. (Currently, mean*

2. All structures will have first floor elevations 6 feet above the highest project wave elevation (based on a 200-year evaluation of the data).

3. Wellness Center structures, as necessary, will be surrounded by a 4-foot tall foundation wall designed to resist and direct flow away from the buildings.

4. A vegetative buffer of wetlands trees will be installed around the perimeter of the property and will be designed to resist hydraulic flow and resist the transport of debris that may impact the Big Wave Property. [4]

5. For the protection of water and wastewater facilities, the project has incorporated the following features:

    a. All water recycling systems will be buried and capable of continuous operation in a submerged state. The minimum elevation of the water recycling system manholes will be 18 feet (3.5 feet above the maximum recorded tsunami inundation). All pumps will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

    b. The well is located at elevation 26 feet (11.5 feet above the maximum tsunami elevation). The well utilizes a submersible pump capable of continuous operation in a submerged state. The well pump will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

    c. As additional backup project contains 2 days of water and wastewater storage that will prevent a lack of supply or wastewater spillage from occurring until after the tsunami event has subsided.

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high tide is at 3.49 feet NGVD.) Project elevations are over 5 feet above the highest of these levels (tsunami at 14.35 feet NGVD).

[4] *"When development is to be sited within a tsunami hazard area, the physical configuration of structures and uses on a site can reduce potential loss of life and property damage. This includes the strategic location of structures and open space areas, interaction of uses and landforms, design of landscaping, and the erection of barriers" (Designing for Tsunamis: Seven Principles for Planning and Designing for Tsunami Hazards, March 2001, National Tsunami Hazard Mitigation Program, pg.21).*

Page III-63 (Project Objectives)

The first bullet on this page in the "Project Objectives" section is revised as follows to provide for clarification:

- To provide office space and building energy-efficient solar-powered affordable housing at below market-rate and provide ownership opportunities to create local, clean, secure and monitored community-centric involvement. It is a goal of the Wellness Center to be affordable to individuals living only on Social Security disability income, among other individuals who qualify for affordable housing.

Page III-63 (Discretionary Approvals)

Amend the "Discretionary Approvals" section to add the Granada Sanitary District (GSD) and California Coastal Commission (as a state agency):

Granada Sanitary District

- The County notes that the project now contemplates a connection to the GSD system and, on that basis, Granada Sanitary District claims to be a Responsible Agency for this project under CEQA. If the applicant requires a discretionary permit action from GSD in order to secure this sewer connection, GSD would meet the definition of a responsible agency under CEQA.

California Coastal Commission

- A Coastal Development Permit from the California Coastal Commission (CCC), in addition to the CDP required from the County of San Mateo, is required for any development activities that may extend into portions of the site that are within the original permit jurisdiction of the CCC.

Page III-64 (San Mateo Local Agency Formation Commission (LAFCO))

Amendment of the County of San Mateo and Half Moon Bay LCPs is not required for project implementation. The section is revised as follows:

As discussed previously, the project applicant proposes to connect to the CCWD. This proposed annexation to CCWD would require review and approval by LAFCO and Coastal Commission approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project. Any temporary or permanent extension of water services outside of the service boundary as defined on January 1, 2003 would require amendments to Coastal Development Permits A-1-HMB-99-20 and A-2-SMC-99-63 ~~as well as amendment(s) to the County of San Mateo and Half Moon Bay Local Coastal Plans~~. LAFCO annexation would require:

(The rest of this section is unchanged)

III. CORRECTIONS AND ADDITIONS TO THE DRAFT EIR
B. REVISIONS TO DRAFT EIR

REVISIONS TO THE DRAFT EIR

Minor Universal Changes Throughout the DEIR:

- Total Wellness Center Units: The total number of Wellness Center units has been reduced from 70 units to 57 units. This change is considered minor, as the occupancy of the Wellness Center has not changed and remains at 50 developmentally disabled adults and 20 staff persons.

- Community Center: All references and descriptions of the "Community Center" should be changed to "Fitness Center," which will be for the use of Wellness Center residents, guests, and staff and Office Park employees only (not open to the general public).

- Wellness Center Buildings: References to Wellness Center Buildings 1 through 7 should be replaced with Buildings A and B.

- Wellness Center Parking Lot: The 73-space parking lot has been changed to provide 50 parking spaces, due to the elimination of the Community Center and the associated need for parking for it.

- Wellness Center Wetlands Trail: This trail has been eliminated.

- Public Storage Building: The size of the public storage building has been reduced from 20,000 sq. ft. to 10,000 sq. ft. Also, the public storage building on the Wellness Center parcel is no longer a separate building, as it is attached to Building A.

- Drainfields/Infiltration Ponds and Rain Gardens: Delete references to drainfields or infiltration ponds and rain gardens, as these proposals have been eliminated from the project.

- Natural Gas Generator: The purpose of the natural gas generator has changed from peak-shaving to backup uses.

- El Granada Mobile Home Park: All references to the El Granada Mobile Home Park are changed to Pillar Ridge Manufactured Home Community.

Text Changes to the DEIR (excludes Project Description[1]):

TABLE OF CONTENTS

There are no changes to this section.

FIGURES[2]

Revised Figure

- Figure IV.H-7: The Tsunami Inundation Map (1989) is replaced with the updated 2009 map version.

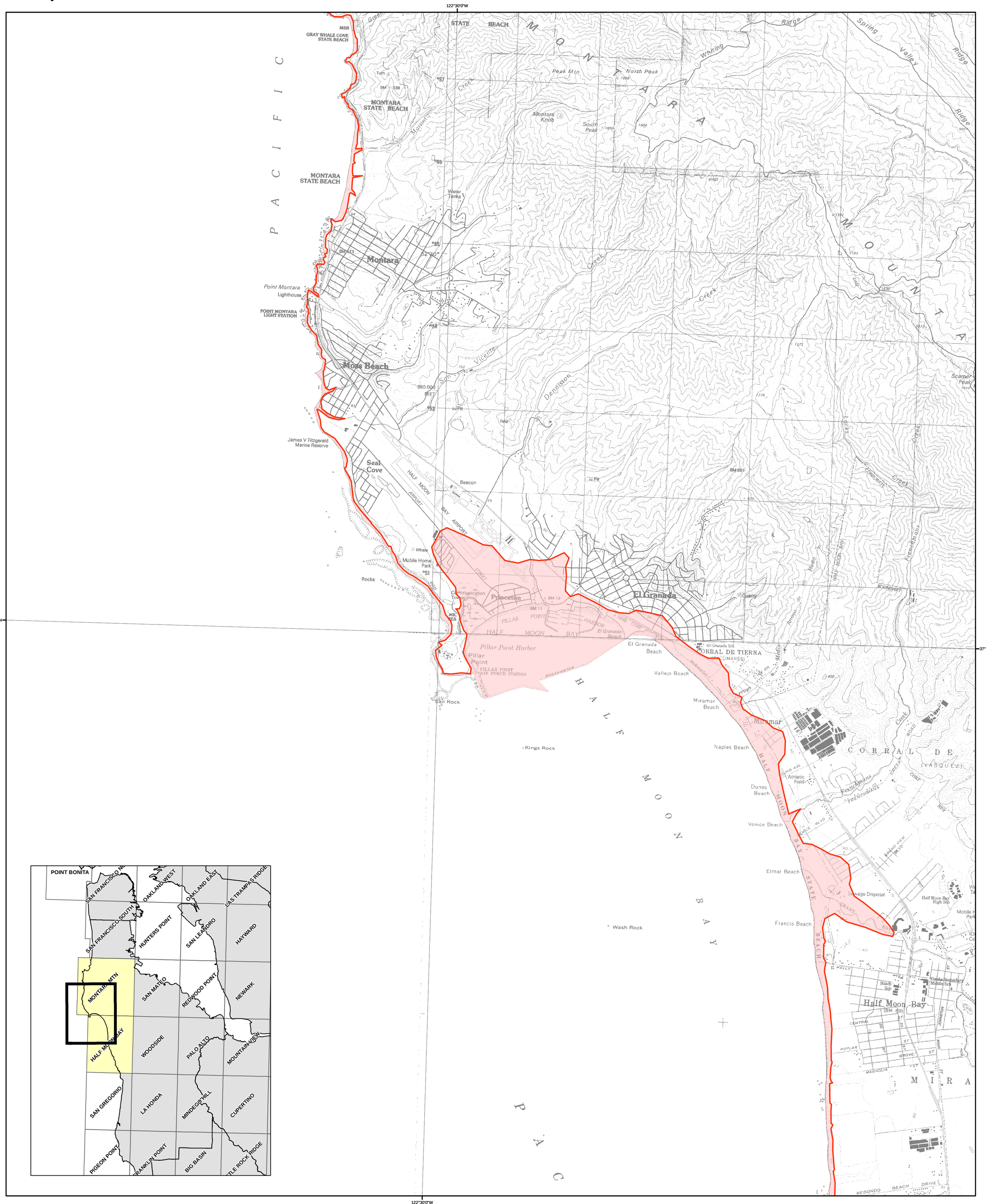
[1] *For changes to the Project Description, refer to Section III.A of the FEIR.*

[2] *Revisions to tables are indicated below, by page number of the DEIR.*

California Emergency Management Agency
California Geological Survey
University of Southern California

Tsunami Inundation Map for Emergency Planning
Half Moon Bay Quadrangle/Montara Mountain Quadrangle

State of California
County of San Mateo



METHOD OF PREPARATION

Initial tsunami modeling was performed by the University of Southern California (USC) Tsunami Research Center funded through the California Emergency Management Agency (CalEMA) by the National Tsunami Hazard Mitigation Program. The tsunami modeling process utilized the MOST (Method of Splitting Tsunamis) computational program (Version 0), which allows for wave evolution over a variable bathymetry and topography used for the inundation mapping (Titov and Gonzalez, 1997; Titov and Synolakis, 1998).

The bathymetric/topographic data that were used in the tsunami models consist of a series of nested grids. Near-shore grids with a 3 arc-second (75- to 90-meters) resolution or higher, were adjusted to "Mean High Water" sea-level conditions, representing a conservative sea level for the intended use of the tsunami modeling and mapping.

A suite of tsunami source events was selected for modeling, representing realistic local and distant earthquakes and hypothetical extreme undersea, near-shore landslides (Table 1). Local tsunami sources that were considered include offshore reverse-thrust faults, restraining bends on strike-slip fault zones and large submarine landslides capable of significant seafloor displacement and tsunami generation. Distant tsunami sources that were considered include great subduction zone events that are known to have occurred historically (1960 Chile and 1964 Alaska earthquakes) and others which can occur around the Pacific Ocean "Ring of Fire."

In order to enhance the result from the 75- to 90-meter inundation grid data, a method was developed utilizing higher-resolution digital topographic data (3- to 10-meters resolution) that better defines the location of the maximum inundation line (U.S. Geological Survey, 1993; Intermap, 2003; NOAA, 2004). The location of the enhanced inundation line was determined by using digital imagery and terrain data on a GIS platform with consideration given to historic inundation information (Lander, et al., 1993). This information was verified, where possible, by field work coordinated with local county personnel.

The accuracy of the inundation line shown on these maps is subject to limitations in the accuracy and completeness of available terrain and tsunami source information, and the current understanding of tsunami generation and propagation phenomena as expressed in the models. Thus, although an attempt has been made to identify a credible upper bound to inundation at any location along the coastline, it remains possible that actual inundation could be greater in a major tsunami event.

This map does not represent inundation from a single scenario event. It was created by combining inundation results for an ensemble of source events affecting a given region (Table 1). For this reason, all of the inundation region in a particular area will not likely be inundated during a single tsunami event.

References:

Intermap Technologies, Inc., 2003, Intermap product handbook and quick start guide: Intermap NEXTmap document on 5-meter resolution data, 112 p.

Lander, J.F., Lockridge, P.A., and Kozuch, M.J., 1993, Tsunamis Affecting the West Coast of the United States 1806-1992: National Geophysical Data Center Key to Geophysical Record Documentation No. 29, NOAA, NESDIS, NGDC, 242 p.

National Atmospheric and Oceanic Administration (NOAA), 2004, Interferometric Synthetic Aperture Radar (IfSAR) Digital Elevation Models from GeoSAR platform (EarthData): 3-meter resolution data.

Titov, V.V., and Gonzalez, F.I., 1997, Implementation and Testing of the Method of Tsunami Splitting (MOST): NOAA Technical Memorandum ERL PMEL – 112, 11 p.

Titov, V.V., and Synolakis, C.E., 1998, Numerical modeling of tidal wave runup: Journal of Waterways, Port, Coastal and Ocean Engineering, ASCE, 124 (4), pp 157-171.

U.S. Geological Survey, 1993, Digital Elevation Models: National Mapping Program, Technical Instructions, Data Users Guide 5, 48 p.

TSUNAMI INUNDATION MAP FOR EMERGENCY PLANNING

State of California ~ County of San Mateo

HALF MOON BAY QUADRANGLE
MONTARA MOUNTAIN QUADRANGLE

June 15, 2009

SCALE 1:24,000

0.5 0.25 0 0.5 1 Miles

1,000 500 0 1,000 2,000 3,000 4,000 5,000 Feet

0.5 0.25 0 0.5 1 Kilometers

Table 1: Tsunami sources modeled for the San Mateo County coastline.

Sources (M = moment magnitude used in modeled event)		Areas of Inundation Map Coverage and Sources Used	
		San Francisco Bay	Pescadero
Local Sources	Point Reyes Thrust Fault	X	
	Rodgers Creek-Hayward Faults	X	
	San Gregorio Fault	X	
Distant Sources	Cascadia Subduction Zone-full rupture (M9.0)	X	
	Central Aleutians Subduction Zone #1 (M8.9)	X	X
	Central Aleutians Subduction Zone #2 (M8.9)	X	
	Central Aleutians Subduction Zone #3 (M9.2)	X	X
	Chile North Subduction Zone (M9.4)	X	
	1960 Chile Earthquake (M9.3)	X	
	1964 Alaska Earthquake (M9.2)	X	X
	Japan Subduction Zone #2 (M8.8)	X	
	Kuril Islands Subduction Zone #2 (M8.8)	X	
	Kuril Islands Subduction Zone #3 (M8.8)	X	
	Kuril Islands Subduction Zone #4 (M8.8)	X	
	Marianas Subduction Zone (M8.6)	X	X

MAP EXPLANATION

Tsunami Inundation Line

Tsunami Inundation Area

PURPOSE OF THIS MAP

This tsunami inundation map was prepared to assist cities and counties in identifying their tsunami hazard. It is intended for local jurisdictional, coastal evacuation planning uses only. This map, and the information presented herein, is not a legal document and does not meet disclosure requirements for real estate transactions nor for any other regulatory purpose.

The inundation map has been compiled with best currently available scientific information. The inundation line represents the maximum considered tsunami runup from a number of extreme, yet realistic, tsunami sources. Tsunamis are rare events; due to a lack of known occurrences in the historical record, this map includes no information about the probability of any tsunami affecting any area within a specific period of time.

Please refer to the following websites for additional information on the construction and/or intended use of the tsunami inundation map:

State of California Emergency Management Agency, Earthquake and Tsunami Program:
http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/B1EC51BA215931768825741F005E8D80?OpenDocument

University of Southern California – Tsunami Research Center:
http://www.usc.edu/dept/tsunamis/2005/index.php

State of California Geological Survey Tsunami Information:
http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/index.htm

National Oceanic and Atmospheric Agency Center for Tsunami Research (MOST model):
http://nctr.pmel.noaa.gov/time/background/models.html

MAP BASE

Topographic base maps prepared by U.S. Geological Survey as part of the 7.5-minute Quadrangle Map Series (originally 1:24,000 scale). Tsunami inundation line boundaries may reflect updated digital orthophotographic and topographic data that can differ significantly from contours shown on the base map.

DISCLAIMER

The California Emergency Management Agency (CalEMA), the University of Southern California (USC), and the California Geological Survey (CGS) make no representation or warranties regarding the accuracy of this inundation map nor the data from which the map was derived. Neither the State of California nor USC shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.

Cal EMA CALIFORNIA EMERGENCY MANAGEMENT AGENCY

CGS CALIFORNIA GEOLOGICAL SURVEY

USC UNIVERSITY OF SOUTHERN CALIFORNIA

Clarification/Correction to Figures

- Figures IV.M-7 though IV.M-14: These figures should show that Airport Street connects to Harvard Avenue, however the line showing the connection of is interrupted by the labeling on the map for Harvard Avenue. This is consistent with Figure III-3 (Aerial Photograph of the Project Site) of the DEIR, which shows the existing street network.

I. INTRODUCTION

There are no changes to this section.

II. SUMMARY

Page II-1 (Summary of the Proposed Project)

The description of the Wellness Center property is revised to reflect the reduction in the number of residential units from 70 units to 57 units, the public storage building is no longer separate, and the parking lot was reduced from 73 spaces to 50 spaces, as follows:

The Wellness Center property (southern parcel) would be subdivided into three separate lots (Lots 1-3). Lot 1 would include a ~~separate~~ storage building (Building 4). Lot 2 would include the Wellness Center with a maximum of ~~70~~ 57 units for approximately 50 DD adults and 20 live-in staff members, other on-site living and recreation facilities (Buildings A and B~~1-3, 5-7~~), and associated fencing.

Lot 3 would include a ~~73~~ 50-space parking lot.

Pages II-1 and 2 (Summary of Project Components)

The following paragraph is revised to add additional clarification and information as follows:

In addition to these above primary components, the proposed project includes: development of an on-site trail system; restoration of wetland habitat; use of sustainable organic/non-organic, on-site/off-site farming for supplemental food sources; a native plant nursery for revegetation/landscaping efforts; recycling and composting; dog walking and grooming services; and development of bus stops and shuttle services.

Proposed utilities and service systems include: solar cells for heating/energy; carbonate fuel cells; backup natural gas generators; wind turbines and generators; geothermal cooling systems; ~~rain garden~~ infiltration of stormwater through the pervious pavement parking lot~~/treatment ponds~~; options for water systems such as: (1) domestic hookups and one fire system hookup, and (2) use of well water/treatment systems and on-site water storage for fire protection (e.g., pool or below-ground storage tank); options for wastewater systems such as: (1) use of an on-site wastewater treatment plant with disposal through a combination of municipal hookup and on-site recycled water usage ~~irrigation and infiltration~~, and/or (2) municipal hookups; and a Communications Building with two microwave dishes.

Pages II-5 and 31 (Table II-1)

Mitigation Measures in Table II-1 (Summary of Environmental Impacts and Mitigation Measures) are revised and replaced with the mitigation measures as shown in the Mitigation Monitoring and Reporting Program provided in Section IV of this FEIR.

III. PROJECT DESCRIPTION

Refer to Section III.A (Changes to the Project Description) of the FEIR.

IV. ENVIRONMENTAL IMPACT ANALYSIS

IV.A Aesthetics

Page IV.A-3 (Off-site Visual Character)

The last sentence of the Off-site Visual Character paragraph on page IV.A-3 (Aesthetics) of the DEIR is revised, as follows:

The land to the north of the manufactured home park is currently undeveloped ~~and in agricultural production~~**.**

Page IV.A-14 (Structural and Community Features – Rural)

All policies listed under "Structural and Community Features – Rural" have been deleted as they only apply to rural sites.

Page IV.A-19 (Proposed Project)

This section is revised as follows to reflect changes in the size and location of the communications use (separate Communications Building has been eliminated):

As described in detail in Section III (Project Description) of this DEIR, the project consists of an office park and residential health center to be developed on two adjacent parcels (approximately 20 acres) that are separated by a natural drainage swale. The Office Park would be developed on the northern parcel and would consist of four three-story buildings totaling 225,000 sq. ft. of area, plus associated common areas, a communications building, and a 640-space parking lot. Building heights would not exceed 45 feet 6 inches, with the four building footprints totaling 78,000 sq. ft. Setbacks are proposed at 153 feet from the eastern project site boundary and 40 feet from the western project site boundary. ~~The proposed Communications Building would be two stories in height (maximum height of 32 feet) and have a footprint of 2,000 sq. ft., bringing the total building footprint for the northern parcel to 80,000 sq. ft. The Communications Building would be located on the southeast corner of the proposed parking lot. Two 36-inch microwave dishes would be mounted on the east face of this building.~~

The Wellness Center would be developed on the southern parcel, and would include a maximum of ~~70~~ 57 apartment style and single-story style residential units for use by up to 50 DD residents and 20 staff

members. The Wellness Center includes a ~~73~~ 50-space parking lot. A 100-foot setback is proposed from the sensitive habitats associated with the drainage swale and marsh. The proposed ~~20,000~~ 10,000 sq. ft. storage facility associated with the Wellness Center would be located within the Half Moon Bay Airport Overlay (AO) along the north side of the property. The Wellness Center buildings would also house 4,300 sq. ft. of compost and private storage uses, as well as 4,000 sq. ft. of communications equipment use.

IV.B Agricultural Resources

There are no changes to this section.

IV.C Air Quality

Page IV.C-20 (Operational Emissions)

Page IV.C-20 of the DEIR erroneously describes the on-site membrane bioreactor (MBR) and the ultraviolet (UV)-disinfected tertiary wastewater treatment plant as "internal combustion equipment." These are non-combustion systems that do not generate emissions regulated by the BAAQMD. The correction has been made in Section III of the FEIR. The "Operational Emissions" section is revised as follows:

Operational emissions associated with the proposed project would result primarily from increased vehicular trips to and from the project site, the internal combustion equipment associated with the ~~on-site membrane bioreactor (MBR), ultraviolet (UV) disinfected tertiary wastewater treatment plant, and the~~ 600 kW emergency natural gas engine generator. Other sources of emissions associated with the project would include area source emissions, such as the use of natural gas for water heaters and cooking appliances. However, the proposed project would supply a majority of energy for heating, cooling and electrical demand with renewable energy, through a combination of off-site and on-site power generation.

The potential on-site power systems include solar heat, photovoltaic panels, wind generation, a backup ~~and cogeneration with a~~ natural gas generator ~~for peak shaving~~ and geothermal cooling. Passive heating and cooling is also a focus of the proposed development architectural design. Additionally, the electrical equipment cooling process would be a source of building heating. Natural gas fuel cells would be utilized for the backup communications power.

IV.D Biological Resources

Page IV.D-15 (Regulatory Setting)

The "Regulatory Setting" section has been revised to add a description of applicable policies of the Resource Management-Coastal Zone District, as follows. Discussion of project conformance with local policies and ordinances is contained in Impact BIO-5 on page IV.D-99 of the DEIR (which remains unchanged).

Resource Management-Coastal Zone District Zoning Regulations

Section 6912.1. Environmental Quality Criteria

(i) No use or development shall have a significant adverse environmental impact upon primary wildlife or marine resources. Development shall clearly demonstrate a high degree of compatibility with, and minimal adverse impact on, wildlife habitat areas.

Section 6912.2. Site Design Criteria

(d) No use, development or alteration shall: (1) create uniform, geometrically terraced building sites which are contrary to the natural land forms; (2) substantially detract from the scenic and visual quality of the County; or (3) substantially detract from the natural characteristics of existing major water courses, established and mature trees and other woody vegetation, dominant vegetative communities or primary wildlife habitats.

(i) Wherever possible, vegetation removed during construction shall be replaced. Vegetation for the stabilization of graded areas or for replacement of existing vegetation shall be selected and located to be compatible with surrounding vegetation, and should recognize climatic, soil and ecological characteristics of the region.

(j) Removal of living trees with trunk circumference of more than 55 inches measured 4-1/2 feet above the average surface of the ground is prohibited, except as may be required for development permitted under this ordinance, or permitted under the timber harvesting ordinance, or for reason of actual or potential danger to life or property.

(k) With the exception of trails and paths, and related appurtenances, no structural development shall be permitted where such development will adversely affect a perennial stream and associated riparian habitat.

Section 6913.2. Primary Fish and Wildlife Habitat Areas Criteria

The following criteria shall apply within Primary Fish and Wildlife Areas as defined or designated in the Open Space and Conservation Element of the San Mateo County General Plan:

(a) Significant reduction of primary habitat areas shall be prohibited.

(b) Ecological characteristics, including the food chain, of primary wildlife habitat areas shall not be changed in a manner that would have substantial adverse impact on the quantity or quality of marine and other wildlife.

(c) The direct removal of primary habitat areas shall be avoided by clustering uses on other portions of the property.

(d) Spawning and nesting areas shall not be subject to development, including intensive public recreational use.

(e) The filling or dredging of tidal marshes, estuaries or marine waters is not permitted.

(f) Watersheds whose streams are used for fish spawning grounds and fish nurseries shall be managed to maintain the flow of fresh water necessary for those purposes.

(g) Public access to primary wildlife habitat areas shall be controlled to allow for compatible recreational use, without over-utilization and disturbance to wildlife populations or over-collection of species.

Section 6913.7. Primary Natural Vegetative Areas Criteria

The following criteria shall apply within Primary Natural Vegetation Areas as defined or designated in the Open Space and Conservation Element of the San Mateo County General Plan.

(a) Significant reduction of vegetation shall be prohibited.

(b) The direct removal of vegetation shall be avoided by clustering uses on other portions of the property.

(c) Public access to vegetation areas shall be controlled to allow for compatible recreational use, without over-utilization and disturbance to vegetation or over-collection of species.

Page IV.D-63 (Table IV.D-2)

The potential for occurrence in Table IV.D-2 for the California Red-Legged Frog has been changed from "Likely" to "Moderate" to be consistent with the potential for occurrence discussed on page IV.D-89 of the DEIR. This clarification does not change the analysis of the DEIR and reports in Appendix E. The "Moderate" potential of occurrence is consistent with the DEIR and reports in Appendix E which state that the site does not contain aquatic habitat capable of supporting breeding CRLF and the lack of landscape features capable of holding ponded water. As stated on page IV.D-19 of the DEIR, a "likely" potential of occurrence describes a site where "habitat components are available on the site, but no record of the species utilizing the project site exists." For reference, a "moderate" potential of occurrence describes a site where "there are known records of occurrence in the vicinity of the site; and/or some of the required habitat components are available on the site, but the site lacks some critical components required by the species."

IV.E Cultural Resources

There are no changes to this section.

IV.F Geology and Soils

There are no changes to this section.

IV.G Hazards and Hazardous Materials

Page IV.G-26 (Mitigation Measure HAZ-3)

Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations) is revised as follows:

Prior to approval of final development plans, an ~~n~~navigation~~al~~ easement shall be ~~established~~ prepared for the project site, ~~to the satisfaction of~~in a form satisfactory to the County Director of Public Works. The ~~n~~navigation~~al~~ easement shall be recorded and shown on the vesting tentative map. With approval of the Wellness Center, it is understood that the Wellness Center property owner(s) and tenants, and their successor's in interest in perpetuity, acknowledge the project's location adjacent to an airport and the noise level inherent in the use. The following statement shall be included in the details of the avigation easement on the recorded Final Map, prior to the issuance of the Certificate of Occupancy for any residential unit at the subject property:

"This parcel is adjacent to the Half Moon Bay Airport. Residents on this parcel may be subject to inconvenience or discomfort arising from airport operations, including but not limited to noise associated with aircraft landings, take-offs, in air maneuvers and fly-overs, and on-the-ground engine start-ups and taxiing. San Mateo County recognizes the value of the Half Moon Bay Airport to the residents of this County and seeks to protect airport operations, existing and future, from significant interference and disruption. With approval of the Wellness Center, it is understood on the part of both the Wellness Center property owner(s) and the Half Moon Bay Airport that airport operations shall take precedence and priority over potential noise complaints received from property owners, residents, staff, guests, and others from the Wellness Center. In the event that the Wellness Center resident(s) or property owner(s) express an inability or unwillingness to accept such noise conditions authorized under the terms of the avigation easement and/or remain unsatisfied with the noise reduction measures being implemented by the airport, the affected resident(s) shall be relocated, with assistance provided by the property owner, to the satisfaction of the Planning and Building Department and/or the Department of Housing. This condition shall be included in all contracts between residents of the Wellness Center and with property owners.

Page IV.G-26 (Impact HAZ-4)

As noted in Comment 225-9, Marine Boulevard is interrupted at the Half Moon Bay Airport and does not provide access to Highway 1. The following sentence in Impact HAZ-4 has been edited to reflect this change:

The project site can be directly accessed from the surrounding streets, including: Cypress Avenue~~, Marine Boulevard~~; Capistrano Road, Prospect Way; and California and Cornell Avenues, located west, east and south of the site, respectively.

IV.H Hydrology and Water Quality

Page IV.H-37 (Regulatory Setting)

The "Regulatory Setting" section has been revised to add a description of applicable policies of the Resource Management-Coastal Zone District, as follows. Discussion of project conformance with water quality standards or waste discharge requirements is contained in Impact HYDRO-1 on page IV.H-47 of the DEIR (which remains unchanged). The addition of policies applicable to groundwater withdrawal and flood and tsunami hazard does not result in change to the analysis of impacts related to these issues.

Section 6912.2. Site Design Criteria

(k) With the exception of trails and paths, and related appurtenances, no structural development shall be permitted where such development will adversely affect a perennial stream and associated riparian habitat.

Section 6912.4. Water Resources Criteria

(a) Solid and liquid waste discharge and disposal shall not be permitted to contaminate water resources or otherwise adversely affect a marine, aquatic or riparian environment. All discharges which might affect a water body shall comply with discharge requirements as established by the Regional Water Quality Control Board.

(b) Discharge of water containing organic nutrients shall be shifted from the aquatic environment to land environments whenever possible when such shift will produce less detrimental effects.

(c) To ensure minimal impact on hydrologic processes, grading and other landscape alteration shall be kept to a minimum and the present configuration of landforms shall be maintained to the maximum extent practicable.

(d) Site preparation procedures and construction phasing shall be carefully controlled to reduce erosion and exposure of soils to the maximum extent possible.

(e) Projects shall utilize methods to maintain surface water runoff at or near existing levels.

(f) Development, with the exception of agricultural uses and public works and public safety projects, which might cause significant adverse impacts upon the natural course or riparian habitat of any stream, shall not be permitted. All developments shall be required to perform all feasible measures to mitigate possible impacts upon such areas.

(g) Excessive inter-basin transfers of water resources which may result in adverse impacts on water regimen stability and water quality shall not be permitted.

(h) Projects shall clearly demonstrate methods to be employed for management of vegetative cover, surface water runoff, groundwater recharge, and erosion and sedimentation processes to assure stability of downstream aquatic environments.

Section 6913.4. Primary Water Resources Area Criteria

The following criteria shall apply within Primary Water Resources Areas as defined or designated in the Open Space and Conservation Element of the San Mateo County General Plan:

(a) It shall be demonstrated that withdrawals from groundwater basins will not be in such quantity that a continued supply would be jeopardized or would result in salt water intrusion.

(b) Construction, including placement of impermeable surfacing or compaction, shall not significantly disrupt or diminish natural patterns of groundwater recharge.

(c) Watersheds whose streams are used for spawning grounds and fish nurseries shall be managed to maintain the flow of fresh water necessary to their maintenance for these purposes.

(d) No use, development or alteration shall be undertaken unless the applicant demonstrates that such use, development or alteration will not interfere with the existing capacity of any water body, will not substantially increase erosion, will not increase the amounts of silt or chemical nutrient pollutants, or do anything else that will contribute to the deterioration of the quality of water in any water body.

(e) All development and associated access roads near existing and future lakes and reservoirs whose maximum design water surface area exceeds 5 acres shall be constructed at least 50 feet from the high water line. Development may not deny reasonable access to the shoreline.

Section 6914.1. Floor Plain Area Criteria

The following criteria shall apply within designated floodways:

(a) No land shall be developed which is held unsuitable for its proposed use by reason of flooding, or other feature harmful to the health, safety or welfare of the future residents or property owners of the proposed development or the community at large. In determining the suitability of the site for its intended use, the following shall be considered: the danger to life and property due to the increased flood heights or velocities caused by excavation, fill, roads, and intended uses; the requirements of the development for a waterfront location; the safety of access to the property for emergency vehicles in times of flood; the expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters expected at the site; and the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(b) No development shall be permitted unless it is demonstrated that such development will not:

(1) Interfere with the existing capacity, substantially increase the erosion, siltation, or chemical nutrients, or anything else that might contribute to the deterioration, of any watercourse or the quality of water in any water body included in this district;

(2) Require storage of material, construction of any substantial flood or erosion control works, or substantial grading or placement of fill, within this area; or

(3) Cause adverse disturbance to any dunes or beaches.

(c) The following uses which have low flood damage potential and do not threaten other lands during times of flood shall be permitted within this area provided they are not prohibited by any other ordinance: agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, viticulture, truck farming, forestry, sod farming, and wild crop harvesting; uses such as loading or parking areas; private and public recreational uses such as beaches, beach cabanas not suitable for use as dwellings, boardwalks and steps to permit access across dunes, beaches, and other fragile resources, pavilions and other similar small platforms, lifeguard stations, golf courses,

tennis courts, driving ranges, archery ranges, picnic grounds, boat launching ramps, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding trails, temporary structures for sale of food and refreshments, arts and crafts; residential uses such as lawns, gardens, parking areas and play areas.

(d) The following shall be permitted provided that they are not otherwise prohibited or do not threaten other lands during the times of flood: extraction of sand, gravel, oyster shells and other materials; marinas, yacht clubs, boat rentals, lighthouses, docks, piers, wharves, groins, bulkheads, seawalls, jetties, harbor works, and erosion control devices; railroads, streets, bridges, utility transmission lines and pipelines.

(e) Buildings (temporary or permanent) shall not be designed or used for human habitation; shall be designed with low flood damage potential; shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters; and shall be firmly anchored to prevent flotation which may result in damage to other structures.

(f) Service facilities such as electrical and heating equipment shall be flood-proofed or constructed at or above the 100-year flood elevation for the particular area.

(g) Storm drainage facilities shall be designed to store and convey the flow of surface waters without damage to persons or property using the following criteria: (1) Major channels or creeks (a watershed area of four or more square miles) with a 50-year average recurrence interval; (2) Secondary channels (a watershed area of one through four square miles) with 30-year average recurrence interval; and (3) Minor channels or storm drain systems (a watershed area of less than one square mile) with a 10-year average recurrence interval. The system shall insure drainage at all points along streets, and provide positive drainage away from buildings and on-site waste disposal sites.

(h) Installation of sewage disposal facilities requiring soil absorption systems shall be prohibited where such systems might not function due to high groundwater, flooding or unsuitable soil characteristics.

(i) All water systems including individual wells located in this area, whether public or private, shall be flood-proofed to a point at or above the flood protection elevation.

(j) Flood-proofing systems plans must be adequate and may include: anchorage to resist flotation and lateral movement; installation of watertight doors, bulkheads, and shutters, or similar methods of closure; reinforcement of walls to resist water pressures; use of paints, membranes or mortars to reduce seepage of water through walls, addition of mass or weight to structures to resist flotation; installation of pumps to lower water levels in structures; construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters; building design and construction to resist rupture or collapse caused by water pressure or floating debris; installation of valves or controls on sanitary and storm drains which permit the drains to be closed to prevent backup of seepage and stormwaters into building or structures; location and installation of all electrical equipment, circuits and electrical appliances so that they are protected from inundation by a 100-year flood; location of storage facilities for chemicals, explosives, buoyant materials, flammable

liquids or other toxic materials which could be hazardous to public health, safety and welfare at elevations above the 100-year flood elevation; or design of such facilities to prevent flotation of storage containers, or damage to storage containers which could result in the escape of toxic materials.

Section 6914.2. Tsunami Inundation Area Criteria

The following criteria shall apply within all areas defined as Tsunami Inundation Hazard Areas:

(a) The following uses, structures, and development shall not be permitted: publicly-owned buildings intended for human occupancy other than park and recreational facilities; schools, hospitals, nursing homes, or other buildings or development used primarily by children or physically or mentally infirm persons.

(b) Residential structures and resort developments designed for transient or other residential use may be permitted under the following circumstances:

(1) The applicant submits a report prepared by a competent and recognized authority estimating the probable maximum wave height, wave force, run-up angle, and level of inundation in connection with the parcel or lot upon which the proposed development is to be located.

(2) No structure covered by this section shall be allowed within that portion of the lot or parcel where the projected wave height and force is fifty percent (50%) or more of the projected maximum, unless: (a) the highest projected wave height above ground level at the location of the structure is less than six (6) feet, (b) no residential floor level is less than two (2) feet above that wave height, and (c) the structural support is sufficient to withstand the projected wave force.

(3) No structure covered by this section shall be allowed within that portion of the lot or parcel where the projected wave height and force is less than fifty percent (50%) of the projected maximum unless the requirements of subsection (b)(2), (a), and (c) are satisfied and the residential flood level is at least one (1) foot above the highest projected level of inundation.

(4) Permission under this subsection shall not be granted if the Planning Commission determines that sufficient data, upon which the report required by subsection (1) must be based, is unavailable and cannot feasibly be developed by the applicant.

Pages IV.H-41 and 42 (Grading and Drainage)

The "Grading and Drainage" section is revised as follows:

The existing site parcels drain either into the drainage swale between the parcels or to the Pillar Point marsh. Previous studies of the project site have indicated that the agricultural furrows on-site generally run perpendicular to the topographic contours, thus in line with the natural drainage of the parcels. The project grading plans (refer to Figures III-25 and III-26) indicate some alteration of existing topography,

including reshaping of some low contours outside the main areas of development, as well as placement of structures, parking lots, and walkways that can alter local drainage patterns.

The current project design focuses construction of new impervious and pervious areas on the relatively flat areas of the site. Figures III-25 and III-26 show that the majority of grading would occur as fill at the edges of the developed areas. ~~Figure III-25 indicates 21,875~~ 21,075 cubic yards (cy) of cut and ~~15,780~~ 14,980 cy of fill are necessary for the Office Park property, mostly for building pads and parking lots. Since some of the net cut from the Office Park property will be transferred as fill to the Wellness Center property, only ~~4,105~~ 3,605 cy of imported fill is projected to be needed. Figure III-26 indicates 870 cy of cut for landscaping rain gardens and 11,070 cy of fill for building pads, the perimeter fire trail, and parking lot within the Wellness Center property.

Newly created impervious area would cover a moderate (13 to 22%) part of the entire project site. Also, the proposed project includes various elements to minimize surface water runoff, including the use of porous pavements for parking lots and walkways and draining roof leaders to these pervious areas ~~infiltrating rain gardens~~.

The Office Park and Wellness Center properties will continue to drain to separate locations. Both properties would include storm drainage systems that collect water from the parking lots and rooftops and terminate in landscaped areas in pervious paved parking areas to allow for infiltration. S~~everal outfalls are shown on Figures III-25 and III-26. The Wellness Center property has four outfalls along its western edge, all of which enter graded low areas that then drain towards Pillar Point Marsh. The Office Park property has three outfalls, two of which are anticipated to lead to localized depressions on site. The other outfall leads to a depressed rainwater garden at the southern edge of the parcel.~~

Except for the buildings, all new pavements (parking lots, walking paths, basketball court/game area) are proposed to be made of permeable materials and are not considered to increase the imperviousness of the site. The parking lot includes 6 inches of concrete, underlain by 12 inches of open graded baserock, which then sits on clayey ~~silt~~ sandy soils. Both the concrete and baserock have permeabilities of 3 inches per hour, with the underlying soil having a permeability of one-half inch to 1 inch per hour.

~~As proposed, on-site infiltration drainfields (or drainfields) will be used, with the Wellness Center property drainfields located on the inside edge of the fire trail that runs along the outside of the developed area and the Office Park property drainfields located just around Building B and next to Buildings A and C on their respective sides facing Building B. All of these proposed drainfields are located upstream of the wetland areas and the Pillar Point Marsh.~~

Page IV.H-43 (Groundwater Recharge System)

The "Groundwater Recharge System" section is revised as follows, as the applicant no longer proposes to infiltrate recycled water using drainfields:

The proposed groundwater recharge system is designed to infiltrate ~~an average of 12,000~~ 20,000 gpd of stormwater ~~and 20,000 gpd of recycled wastewater~~. Key stormwater infiltration components of the system are the planned permeable concrete parking lots and walkways and roof drains that will direct runoff to infiltration areas located under the parking lots. ~~and rainwater gardens.~~ Recycled wastewater

that is not used for toilet flushing will recharge groundwater through agricultural use and sub-surface drip irrigation for the landscaping. ~~and three infiltration drainfields. Final design of the drainfields would be based on certified percolation tests.~~

The groundwater recharge system will double as a stormwater control system, with plans to capture and treat 80% of the surface water runoff. ~~To maximize the ability to recharge groundwater from recycled water, on-site stormwater runoff needs to be minimized. Minimizing stormwater runoff also helps meet stormwater runoff water quality criteria.~~

Page IV.H-45 (Wastewater Pollutant Discharge)

The "Wastewater Pollutant Discharge" section is revised as follows to eliminate the 'drainfield' references:

Other than stormwater runoff, the proposed project could contribute pollutants to the environment via discharge of wastewater, which generally can have various contaminants when untreated, including human bodily waste, detergents, abrasives, and other household chemicals. Even recycled wastewater can contain relatively high levels of certain contaminants, including salts. The project includes the development of an on-site membrane bioreactor (MBR) wastewater treatment plant (MBR plant) for treatment and recycling of wastewater produced on-site. The project is anticipated to generate approximately 26,000 gpd of domestic wastewater. The wastewater influent to the MBR plant will include both black wastewater from toilets and grey wastewater from other fixtures. The MBR plant will be used to treat and recycle 16,000 gpd of the wastewater for reuse in toilets on-site, with the remainder of the treated wastewater applied as landscape/agricultural irrigation ~~and infiltrated via three drainfields~~. For these uses, the MBR plant will need and is planned to meet Title 22 Standards for tertiary treated wastewater and reuse.

Page IV.H-46 (Site Coverage)

The "Site Coverage" section is revised as follows:

The total project would have approximately 3 acres of impervious surface area and 9.5 acres of pervious parking lots and walkways that are designed for groundwater infiltration. The remaining 9 acres would be restored wetlands, organic gardens, and native plant landscaped areas that is also considered pervious surface. Only ~~10~~ 15% of the total site coverage is impervious surface. Tables IV.H-4 and IV.H-5 provide a breakdown of the impervious and pervious surfaces associated with the proposed development within the Office Park and the Wellness Center properties, respectively.

Page IV.H-46 (Tables IV.H-4 and IV.H-5)

Revised Table IV.H-4 Office Park Property Site Coverage	
Impervious Surfaces	
Buildings A-D ~~and Communication Building~~	~~80,000~~ 78,000
Total Improved Impervious Surfaces	**~~80,000~~ 78,000**
Pervious Surfaces	
Porous Parking Lot	243,925
Walkways	~~13,052~~ 17,000
Islands/Sidewalks	18,065
Subtotal Improved Pervious Surfaces	***~~275,042~~ 278,990***
Total Improved (Pervious and Impervious) Surfaces (not including Wetlands)	**~~355,042~~ 356,990**
Total Wetlands Restoration (Pervious)	226,038
Total Pervious Surface	~~501,080~~ 505,028
Total Parcel Area	**620,841**
Total Percent Pervious	**~~87.1~~ 81.3%**
Percent Wetlands Restoration	**36.4%**

Revised Table IV.H-5 Wellness Center Property Site Coverage	
Surfaces	**Area (sf)**
Impervious Surfaces	
Buildings A and B ~~1—7~~	46,999
~~Pool Building~~	~~3,464~~
~~Water Recycling Plant~~	~~600~~
Total Improved Impervious Surfaces	**~~51,063~~ 46,999**
Pervious Surfaces	
Porous Parking Lot	30,721
Basketball Court, Game Space[1]	12,601
Walkways/Multipurpose Trails	9,211
Subtotal Improved Pervious Surfaces	*52,533*
Total Improved Surfaces (not including Wetlands)	**~~103,596~~ 99,532**
Total Wetlands Restoration	122,749
Total Pervious Surfaces	**175,282**
Total Parcel Area	**229,779**
Total Percent Pervious	**76%**
Percent Wetlands Restoration	**53%**
[1]While applicant currently proposes an indoor basketball court, impervious surface calculations includes an outdoor basketball court, in the event that the basketball court is relocated outside.	

Page IV.H-53 (Mitigation Measure HYDRO-3)

The first sentence of the second paragraph of Mitigation Measure HYDRO-3 has been corrected to require the submittal of a SWPPP to San Mateo County at the building permit application stage, instead of at the Final Map stage. At the final map stage, the construction plans are not finalized to the level of detail required for the preparation of a SWPPP.

Submittal of a project erosion control plan and SWPPP to San Mateo County for review shall be required as part of the ~~Final Map~~ building permit application. The erosion control plan shall include components for erosion control, such as phasing of grading, limiting areas of disturbance, designation of restricted-entry zones, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection, and provision for revegetation or mulching. The plan shall also prescribe treatment measures to trap sediment once it has been mobilized, at a scale and density appropriate to the size and slope of the catchment. These measures typically include inlet protection, straw bale barriers, straw mulching, straw wattles, silt fencing, check dams, terracing, and siltation or sediment ponds. Other aspects of the SWPPP, especially those related to water quality, are discussed below for other mitigation measures.

Page IV.H-54 (Impact HYDRO-5)

Impacts discussed in the DEIR related to wastewater disposal in leachfields and surface runoff drainage to wetlands via rain gardens, including potential groundwater and surface water contamination, have been further reduced. Instead of flowing to rain gardens located within the restored wetland areas, rainwater from surfaces and roof gutters will be directed to underground storage systems below the parking lot. On page IV.H-55, Table IV.H-7, the hydrology analyses of the DEIR concluded that the project would result in an 80% increase in storm water discharge from existing site conditions. This conclusion is based on analysis contained in the Technical Memorandum #1 provided in Appendix H of the DEIR. The increase in imperviousness, and hence the 80% increase in runoff described in the DEIR, is based solely on building roof runoff.

Project drainage is revised to direct all of the roof runoff through a piped storage system below the parking lot that is sized for a 10-year storm. Likewise, all surface water in the parking lot would be absorbed into the permeable pavers and directed into the same system.

There will be no sub-surface disposal of wastewater, with the exception of minimal runoff of treated wastewater used for surface and solar panel washing, as allowed by CDPH and RWQCB. All excess treated recycled water not used by toilet flushing, irrigation, and washing uses will be directed to the GSD system, using already sewer capacity (8 EDUs) which has already been assessed to the property by GSD. Based on the foregoing, project impacts to hydrology and water quality, which are less than significant with mitigation, are likely to be further reduced. The section is revised, as follows:

Quantity of Surface Water Runoff

A drainage report was not provided by the applicant. Table IV.H-6 summarizes the relevant parameters given by the applicant and used to estimate the existing (pre-project) and post-project stormwater discharges onsite for various size storms, as applicable to a scenario in which all rooftop runoff is directed to rain gardens in the wetlands. Table IV.H-7 presents the results of the runoff analysis under this

scenario. As detailed in the *Technical Memorandum #1 (TM #1): Hydrologic Analysis of the Big Wave Project*, prepared by Schaaf & Wheeler, May 15, 2009 provided in Appendix H of this DEIR, the rational method, combined with parameters from the Santa Clara County Drainage Manual (SCCDM), were used to estimate site runoff during a 2-year, 10- year, and 100-year storm event.

These estimates were based on the soil types described earlier, considering them Hydrologic Group C soils with moderately slow permeability. The high groundwater table can also lead to significant stormwater runoff, especially during large storm events. ~~However, effects of the high groundwater table are not incorporated in the following estimates.~~

Table IV.H-7 indicates that the stormwater discharges would increase by 80 percent for all three analyzed events, under this worst-case scenario. The 80% increase in surface flow is attributed to the creation of impervious area from building construction on the project sites and direction of roof runoff to a detention system that will eventually discharge to the wetlands in metered flows not to exceed existing flow rates. Table 4 of TM#1 shows that the Wellness Center proposal would result in an increase in impervious developed area of 1.2 acres (the roof area of the proposed buildings per Table IV.H-5). Table 4 shows that the Office Park proposal would result in an increase in impervious developed area of 1.8 acres (the roof area of the office buildings per Table IV.H-4). Therefore, the increase in imperviousness, and hence the 80% increase in runoff described in the DEIR, is based solely on building roof runoff. The proposed runoff from the site will enter~~s~~ into a ~~some~~ storm water detention system ~~drains and then rain gardens and other retention basins~~ and then be released to the existing wetlands in metered flow rates not to exceed existing rates. ~~Any further runoff proceeds to Pillar Point Marsh, for which no new development or storm drainage facilities are planned or ever likely to be planned. Therefore, there are no existing or planned stormwater drainage systems whose capacities could be exceeded by the increased stormwater runoff from the site.~~

Table IV.H-6
Existing (Pre-) and Post-Project Discharge Parameters (Without Parking Lot Storage & Infiltration System) [3]

(table contents are unchanged)

Table IV.H-7
Existing (Pre-) and Post-Project Peak Storm Discharges for the 2-Year, 10-Year, and 100-Year Event (Without Parking Lot Storage & Infiltration System)[3]
(table contents are unchanged)

Furthermore, the project under the worst-case scenario, ~~without any onsite mitigation, would~~ will not increase the total watershed peak flows to Pillar Point Marsh. ~~by an estimated 3 percent; project site flows would go from representing 2.9 percent to 5.8 percent of the marsh watershed's peak flows. With the planned detention, the percentage increase should be even smaller.~~ The *Hydrologic Analysis of the Big Wave Project*, prepared by Schaaf & Wheeler, May 15, 2009 (TM#1) provided in Appendix H of this DEIR presents details of the estimate for the entire watershed drainage.

Overall, impacts of increasing quantities of stormwater runoff would be ***less than significant***, and no

[3] *The Post-Project analyses in this table is based on a worst-case scenario, discharge of building roof drainage as surface water into the restored wetlands, that does not consider the proposed parking lot storage & infiltration system.*

mitigation measures are required.

Page IV.H-57 (Mitigation Measure HYDRO-5)

Mitigation Measure HYDRO-5 (Surface Water Runoff Quality) is revised to add an additional paragraph, per Technical Memorandum #1 (TM #1), dated May 15, 2009, prepared by Schaaf and Wheeler (included in Appendix H of the DEIR):

Per Technical Memorandum #1 (TM #1), dated May 15, 2009, prepared by Schaaf and Wheeler (included in Appendix H of the DEIR), Stormwater Best Management Practices should serve several hydrologic and water quality functions, including maximizing groundwater recharge, minimizing quantities of stormwater runoff, and reducing pollutant loadings in stormwater runoff.

IV.I Land Use and Planning

Page IV.I-3 (County of San Mateo Zoning Regulations)

The description of the zoning designations of the project site is revised as follows to reflect limited portions of the wetland areas and buffer zones in the area of the drainage swale that are zoned Resource Management (RM):

Office Park Property (Northern Parcel)

- Light Industrial/Design Review/Coastal Development District (M-1/DR/CD)
- Light Industrial/Airport Overlay/Design Review/Coastal Development District (M-1/AO/DR/CD)
- Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD)

Wellness Center Property (Southern Parcel)

- Waterfront/Design Review/Coastal Development District (W/DR/CD)
- Waterfront/Airport Overlay/Design Review/Coastal Development District (W/AO/DR/CD)
- Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD)

Page IV.I-10 (Land Use Designation and Zoning)

The "Land Use Designation and Zoning" section has been revised to include applicable regulations of the Resource Management-Coastal Zone District, as follows:

On the southern parcel (Wellness Center site), portions of the property within the delineated wetlands and 100-foot buffer zone area are within the Resource Management-Coastal Zone District, as shown in Figure A of the FEIR. On the northern parcel (Office Park site), a small portion of the property within the delineated wetlands is within the Resource Management-Coastal Zone District, as shown in Figure A of the FEIR. Wetlands restoration is the only type of development activity proposed within these areas. The following regulations apply to the proposed wetlands restoration:

For purposes of Chapters 20A, 20A.2, 23 and 36, but excluding those uses defined below, "development" shall mean the construction of any significant structure on land, or in or under water; the discharge or disposal of any significant dredged material or any gaseous, liquid, solid or thermal waste; the division or subdivision of land into two or more parcels; reconstruction or substantial alteration of any significant structure, including any facility of a private, public or quasi-public utility; and any major removal of vegetation.

Section 6905 (Permitted Uses):

(a) Agricultural uses and accessory structures, temporary road stands for seasonal sale of produce grown in San Mateo County, providing that 1) sales activities are limited to less than a nine-month operating period per year, 2) all structures are of portable construction and shall be removed from the site within 10 days of the seasonal closure of the stand, 3) road stand size shall be limited to 200 sq. ft. and appearance, including signs, color and materials, is consistent with the policies of the certified LCP and meets the satisfaction of the Planning Director; and 4) access and parking requirements meet the satisfaction of the Director of Public Works, however, no impervious paving shall be required.

Section 6906.1. Conservation Open Space Easement

Require, after any land divisions, that the applicant grant to the County (and the County to accept) a conservation easement containing a covenant, running with the land in perpetuity, which limits the use of the land covered by the easement to uses consistent with open space (as defined in the California Open Space Lands Act of 1972 on January 1, 1980).

Page IV.I-12 (New Section: California Coastal Act)

A Coastal Development Permit from the California Coastal Commission (CCC), in addition to the CDP required from the County of San Mateo, is required for any development that extends into portions of the site that are within the original permit jurisdiction of the CCC. The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among other things) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the CCC or the local government.

The Coastal Act includes specific policies (see Division 20 of the Public Resources Code) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design,

power plants, ports, and public works. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the CCC and by local governments, pursuant to the Coastal Act. [4]

Page IV.I-29 (Discretionary Actions)

The "Discretionary Actions" section has been revised to add the California Coastal Commission as a state agency:

California Coastal Commission

A Coastal Development Permit from the California Coastal Commission, in addition to the CDP required from the County of San Mateo, is required for any development that may extend into portions of the site that are within the original permit jurisdiction of the CCC.

Page IV.I-30 (San Mateo Local Agency Formation Commission (LAFCO))

Amendment of the County of San Mateo and Half Moon Bay LCPs is not required for project implementation. The section is revised as follows:

As discussed previously, the project applicant proposes to connect to the CCWD. This proposed annexation to CCWD would require review and approval by LAFCO and approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project. Any temporary or permanent extension of water services outside of the service boundary as defined on January 1, 2003 would require amendments to Coastal Development Permits A-1-HMB-99-20 and A-2-SMC-99-63~~ as well as amendment(s) to the County of San Mateo and Half Moon Bay Local Coastal Plans~~. LAFCO annexation would require:

(The rest of the section is unchanged)

Page IV.I-32 (New Section: Coastal Act under Impact LU-2)

Add a section titled "California Coastal Act," as follows:

California Coastal Commission (CCC) staff has suggested that a portion of the project site may be within the original permit jurisdiction of the CCC. The standard of review applied by the CCC to any development that extends into the CCC's original permit jurisdiction is the California Coastal Act. Project consistency with the policies of the County's LCP, which is the standard of review for development within the County's permit jurisdiction, is evaluated in Table IV.I-1 (County of San Mateo General Plan Consistency Analysis) of the DEIR. Development within the portion of the site that is within the County's permit jurisdiction must also conform to the public access and recreation policies of the Coastal Act because the site is seaward of the nearest public through road to the coast. The County has added the recommended Mitigation Measure LU-2 to require the property owner to work with the Coastal Commission to identify and delineate the possible existence and extent of any CCC original permit jurisdiction over the project site and obtain all necessary approvals from the Coastal Commission prior to

[4] *Source: http://www.coastal.ca.gov/whoweare.html (Coastal Commission website)*

the initiation of any development within areas of CCC jurisdiction. The project will be required to conform to the applicable policies of the LCP and Coastal Act through the necessary coastal development permit review and approval procedures. Therefore, impacts would be less than significant.

Page IV.I-35 (County of San Mateo Zoning Regulations)

The "County of San Mateo Zoning Regulations" are revised as follows to add the Resource Management (RM) District as an applicable zoning district:

The project site is zoned Light Industrial/Design Review/Coastal Development District (M-1/DR/CD) and Light Industrial/Airport Overlay/Design Review/Coastal Development District (M-1/AO/DR/CD) and Resource Management-Coastal Zone/Design Review District/Coastal Development District (RM-CZ/DR/CD) (northern parcel), and Waterfront/Design Review/Coastal Development District (W/DR/CD) and Waterfront/Airport Overlay/Design Review/Coastal Development District (W/AO/DR/CD) and Resource Management-Coastal Zone/Design Review/Coastal Development District (RM-CZ/DR/CD) (southern parcel). The proposed project would be designed and constructed in conformance with all applicable development regulations of the Zoning Regulations and would be subject to Design Review by the County's Coastside Design Review Committee. Additionally, the project would comply with all provisions of the Zoning Regulations, which regulate parking, fences, and accessory structures. Therefore, impacts would be less than significant and no mitigation measures are required.

Page IV.I-36 (San Mateo Local Coastal Program under Impact LU-2)

The following replaces the analysis in Section Impact LU-2 with regard to project consistency with the County of San Mateo Local Coastal Program:

County of San Mateo Local Coastal Program (LCP)

In a comment letter dated December 24, 2009, the Coastal Commission states that the project appears to contain historic tidelands that CCC staff suggests may lie within the Coastal Commission's original permit jurisdiction. Per the Public Resources Code 30519(a) and (b), the local government has the development review authority for any new development proposed within the area to which the certified local coastal program has been locally approved and certified by the California Coastal Commission (CCC), with the exception of any development proposed or undertaken on any tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the coastal zone. The CCC has the development review authority for development on the above listed lands, in which development would be subject to the regulations of the Coastal Act.

The County of San Mateo is working with the CCC and the applicant to determine the possible existence and extent of historic tidelands that affect the proposed development. As to all parts of the project site that are outside of the jurisdictional boundaries of the CCC and within the jurisdictional boundaries of the County of San Mateo, development in those areas would be subject to the Local Coastal Program (LCP) and Coastal Act access and recreation policies. Project consistency with individual LCP policies is evaluated in Table IV.I-1 (County of San Mateo General Plan Consistency Analysis) in the DEIR.

The proposed project would be designed and constructed in conformance with all applicable development regulations of the LCP and the Coastal Act. Therefore, impacts would be less than significant and no mitigation measures are required. However, the County has added the following recommended mitigation measure to require the property owner to work with the Coastal Commission to identify and delineate the possible existence and extent of CCC original permit jurisdiction over the project site and obtain all necessary approvals from the Coastal Commission prior to the initiation of any development within areas of CCC original permit jurisdiction.

New Recommended Mitigation Measure LU-2

The property owner shall work with the California Coastal Commission (CCC) to identify and delineate the CCC's jurisdiction over the project site, subject to CCC review and approval. The property owner shall obtain all necessary approvals from the Coastal Commission prior to the initiation of any development within areas of CCC jurisdiction.

Page IV.I-36 (Half Moon Bay Airport Land Use Plan under Impact LU-2)

The analysis in Section Impact LU-2, with regard to project consistency with the Half Moon Bay Airport Land Use Plan, is revised as follows:

The proposed project is subject to the provisions of the Half Moon Bay Airport Land Use Plan. The proposed project would be designed and constructed in conformance with all applicable development regulations of the Half Moon Bay Airport Land Use Plan. Therefore, impacts would be less than significant and no mitigation measures are required. However, in order to capture State Department of Transportation, Division of Aeronautics, recommendations, the following recommended mitigation measure has been added:

New Recommended Mitigation Measure LU-3

The applicant shall comply with the following recommendations of the State Department of Transportation, Division of Aeronautics: 1) Federal Aviation Administration (FAA) Advisory Circular 150 /5370-2E "Operational Safety on Airports during Construction" shall be incorporated into the project design specifications 2) in accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace" a Notice of Proposed Construction or Alteration (Form 7460-1) shall be provided if required by the FAA, and 3) the location and type of landscape trees shall be selected carefully so they do not become a hazard to aircraft around the airport.

Page IV.I-36 (County of San Mateo Community Design Manual under Impact LU-2)

Apply the following revisions to the analysis in Section Impact LU-2 with regard to project consistency with the County of San Mateo Community Design Manual:

County of San Mateo Community Design Manual

As previously discussed, the Community Design Manual was created to provide guidelines by which individual building permits are evaluated. The Community Design Manual does not set forth rigid rules

for designing structures but rather establishes general guidelines in which consideration latitude remains, so as not to stifle individual initiative. The project would be designed to be consistent with individual Community Design Manual guidelines. The proposed project would be designed and constructed in conformance with all applicable development regulations of the Community Design Manual and would be subject to Design Review by the County's Coastside Design Review Officer~~Committee~~. Therefore, impacts would be less than significant and no mitigation measures are required. However, the following recommended mitigation measure has been added to improve compliance with the design review requirement:

New Recommended Mitigation Measure LU-4

The applicant shall comply with the recommendations of the County's Coastside Design Review Officer to implement changes to the Office Park buildings that improve consistency with applicable policies of the LCP and the Community Design Manual, prior to the project approval by the Planning Commission.

Page IV.I-37 (San Mateo Local Agency Formation Commission (LAFCO))

Amendment of the County of San Mateo and Half Moon Bay LCPs is not required for project implementation. The section is revised as follows:

As noted in Section III (Project Description) of the DEIR, the project applicant proposes to connect to the Coastside County Water District (CCWD). This proposed annexation to CCWD would require review and approval by LAFCO and approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project. Any temporary or permanent extension of water services outside of the service boundary as defined on January 1, 2003 would require amendments to Coastal Development Permits A-1-HMB-99-20 and A-2-SMC-99-63~~ as well as amendment(s) to the County of San Mateo and Half Moon Bay Local Coastal Plans~~. LAFCO annexation would require:

(The rest of the section is unchanged)

Page IV.I-62 (Table IV.I-1)

In Table IV.I-1, discussion of LCP Policies 8.16, 8.19, 8.20, and 8.21 has been deleted as these policies only apply to rural sites.

IV.J Noise

Pages IV.J-21 and 22 (Mechanical Equipment Noise levels)

This section has been revised to add additional detail regarding the noise levels produced by the proposed wind turbines:

As part of the proposed project, new rooftop mechanical equipment and heating, ventilation, and air conditioning (HVAC) units and exhaust fans may be installed on the proposed buildings. Large HVAC systems can result in noise levels that average between 50 and 65 dBA Leq at 50 feet from the equipment.

Standard building parapets typically reduce these noise levels by around 10 to 15 dBA (or approximately 35 to 50 dBA after noise reduction from building parapets) and this type of equipment is generally not audible from nearby uses.

The project will utilize slow speed turbines that are enclosed within a housing. Wind turbines would be located on the roof of the Office Park and the Wellness Center. Wind turbine housing will provide noise insulation as well as reduce hazards to birds. With housing, the wind turbines would produce noise levels of approximately 35 dB at 50 feet from the turbines.

The noise levels from these~~is~~ equipment would be less than the ambient noise levels associated with automobile and aircraft traffic and would not exceed the 'Normally Acceptable' noise level standard of 60 dBA CNEL for residential uses or the County of San Mateo Ordinance Code noise threshold of 55 dBA (Category 1: cumulative 30 minute noise level increase in a 1 hour period). Therefore, the potential impacts to residents of the Wellness Center or the mobile home park would be ***less than significant***.

IV.K Population and Housing

There are no changes to this section.

IV.L Public Services

There are no changes to this section.

IV.M Transportation/Traffic

Page IV.M-24 (Community Center)

This section has been deleted, as the Community Center has been eliminated. Fitness Center would be available for use by Wellness Center residents, guests, and staff and Office Park employees only.

Page IV.M-27 (Table IV.M-6)

As discussed in the Transportation/Traffic Chapter of the DEIR, the proposed project would add approximately 2,123 daily trips to roads in the vicinity of the project site. The Wellness Center has been reduced in size and scope in order to avoid development within the area determined to be an archeological site in compliance with Mitigation Measure CULT-2. As stated previously, the Community Center aspect has been removed, thereby restricting pool, fitness center, and locker facilities for use by Wellness Center residents, staff and their guests and Office Park employees only. Initially, these facilities were available to the Coastside public. In closing these facilities to the public, traffic trips attributed to this function in the DEIR have been removed. Also, the public storage use at the Wellness Center site has been reduced from 20,000 sq. ft. to 10,000 sq. ft. The traffic trips estimated for the Wellness Center have been reduced by 215 trips, from 384 to 169 trips. Therefore, total project trips have been reduced from 2,123 trips to 1,908 trips. The reduction in trips is local and does not impact the intersections at Highway 1 and 92. Table IV.M-6 is revised as follows to delete traffic associated with the Community Center (which has been eliminated):

Revised Table IV.M-6
Project Trip Generation Estimates (Modified Wellness Center and 225,000 sf Office)

Use	Size (sf)	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Office Park											
General Office	90,000	11.01	991	1.55	123	17	140	1.49	23	111	134
Research and Development	56,250	8.11	456	1.22	57	12	69	1.07	9	51	**60**
Storage	33,750	3.56	120	0.30	8	2	10	0.32	3	8	11
Light Manufacturing	45,000	3.82	172	0.73	23	7	33	0.73	12	21	33
	225,000		**1739**				252		47	191	238
Wellness Center											
Residential (Units)	~~42~~ 37	0	0		0	0					
~~Breezeway~~ Staff	20 units	6.65	133	0.51	2	8	10	0.62	8	4	12
Storage	~~20,000~~ **10,000**	**3.56**	~~71~~ **36**	**0.30**	~~**5**~~ **3**	**1**	~~**6**~~ **4**	**0.32**	~~**2**~~ **1**	~~**5**~~ **3**	~~**6**~~ **4**
~~Community Center~~	~~5,325~~	~~33.80~~	~~**180**~~	~~4.57~~	~~22~~	~~2~~	~~24~~	~~2.19~~	~~7~~	~~5~~	~~12~~
Trips			~~**2,123**~~ **1908**		~~**243**~~ **216**	~~**49**~~ **47**	~~**292**~~ **266**		~~**63**~~ **56**	~~**206**~~ **198**	~~**268**~~ **254**

Page IV.M-28 (Mitigation Measure TRANS-1)

Mitigation Measure TRANS-1 is deleted and replaced with the following. The revised mitigation measure incorporates and increases the requirements of the original mitigation measure. In the DEIR, the mitigation measure required a bi-annual traffic report following full project occupancy, which studies only the Cypress Avenue and SR 1 intersection. The revised mitigation measure requires a traffic report for potentially impacted intersections to be submitted to the Community Development Director, at occupancy of every 60,000 sq. ft. of office space up until full project occupancy and bi-annually after full project occupancy.

Revised Mitigation Measure TRANS-1 of the FEIR: The property owner shall submit a traffic report to the Community Development Director, at full occupancy of every 60,000 sq. ft. of office space, until full project occupancy, and submit traffic reports bi-annually after full project occupancy. The report shall be signed and stamped by a Professional Transportation Engineer in the State of California and identify the Level of Service (LOS) at the intersection of Cypress Avenue and SR 1, Airport Street & Stanford/Cornell (Study Intersection 3 of DEIR), Broadway & Prospect Way (Study Intersection 2), Prospect Way & Capistrano (Study Intersection 1) and State Route 1 & Capistrano (Study Intersection 8) to evaluate if they maintain a LOS C or better. If Levels of Service fall below existing levels for the intersection of Cypress Avenue and SR1 (LOS C in the AM and LOS D in the PM), the applicant shall

coordinate with Caltrans to pay a fair share for the installation of a signal as necessary to ensure that the signal will be installed within 1 year of the date of that report. If traffic reports reveal that the LOS of any of the other intersections listed above fall below LOS C, it shall identify methods for reducing vehicle trips to and from the project site, as well as other roadway or intersection improvements that would result in LOS C or better. The applicant shall implement the measures required by the Department of Public Works and the Planning and Building Department, subject to all necessary permitting and environmental review requirements, within 1 year of the date of that report. In the event that permits required for roadway or intersection improvements are not obtained, the methods for maintaining LOS C or better shall be achieved by reducing vehicle trips to and from the project site.

Page IV.M-38 (Impact Trans-5)

This section is revised to clarify County parking requirements for permitted uses in the M-1 District, as follows:

As part of the approval process, the proposed project will be required to provide adequate parking in proportion with and sufficient to accommodate the potential demand created by the project. No off-site parking spaces are proposed for this project; all parking spaces would be provided on-site. As discussed previously, the County parking ordinance requires one space for every 200 sq. ft. of office space~~, and does not specify parking requirements for lower density uses~~. The project proposes low-density office use and the applicant is requesting a parking space exception from the County, if one is needed. ~~to provide one parking space for every 250 sq. ft. of office space~~. The project proposes to provide 640 parking spaces for the mixed-use Office Park development on the northern parcel, 12 of which would be ADA handicap accessible. Table IV.M-9 illustrates the method for calculating required parking spaces for the proposed Office Park uses and compares to the parking space exception requested by the applicant.

According to the current County requirement for office space use, 737 parking spaces would be required if the building constructed at the Office Park are used entirely for professional offices. ~~If the County approves a parking space exception for low-density office use, the requirement would be reduced to 635 parking spaces.~~ Other types of uses proposed for the office site have lesser parking requirements, and depending on the actual extent of non-office uses, could reduce the amount of required parking to 518 spaces. The County may agree to accept the proposed 640 parking spaces as conforming to the 628 required parking spaces, which represents an average of the "lower limit" of 518 parking spaces (calculated based on parking requirements for all uses which are permitted in "M" Districts, but not specifically enumerated in the parking regulations) and the "upper limit" of 737 required parking spaces. Furthermore, if needed, the applicant would implement the following parking options to reduce any potential impacts from the proposed parking exception:

- Implement parking procedures that result in office workers utilizing ride sharing, shuttle service to park and ride lots, and public transportation.

- Work with the County and Transit Authority to increase the San Mateo County Transit Authority Bus Service along Airport Street.

- Provide Shuttle Bus Service to the Office Park location from the Park and Ride located in Pacifica, Princeton and Half Moon Bay.

- Extend multi-purpose bike and walking trails connecting the project to parks and services. These trails may include the trail to the Post Ridge property and the multipurpose trail along Airport Street and Princeton.

Revised Table IV.M-9
Office Park Required Parking Spaces

Proposed Use	Area (sf)	Average Trip Rate	Office Trip Equivalency Ratio	~~Equivalent Office Space (sf)~~	Parking Spaces Required under M-1 District[1]	Parking Spaces Required (200 sf/ office space)	~~Parking Exception (250 sf/space)~~
General Office	90,000	11.01	1.0	~~90,000~~	450.00	450	~~360~~
Research and Development	56,250	8.11	.74	~~41,625~~	28.26	208	~~167~~
Light Manufacturing	45,000	3.56	.33	~~11,138~~	22.50	0	~~45~~
Storage uses	33,750	3.82	.35	~~15,750~~	16.88	79	~~63~~
	225,000	-	-	~~158,513~~	517.64	737	~~635~~
Lower Limit of Required Parking Spaces (County):							**518**
Upper Limit of Required Parking Spaces (DEIR)							**737**
Average of Above:							**628**
Total Proposed Parking Spaces							**640**

[1]The Parking Regulations require "1 space for each 2 employees on largest shift; in no case less than 1 space for each 2,000 sq. ft. of floor area" for all uses which are permitted in "M" Districts, but not specifically enumerated in the regulations.

Table IV.M-10 illustrates the parking spaces proposed for the Wellness Center (southern parcel), which includes ~~73~~ 50 parking spaces to accommodate the live-in staff (caregivers and employees), guests, and service areas (i.e., pick-up/drop-off services). It was assumed for the Wellness Center's parking requirements that all Wellness Center employees (special needs individuals and staff) would live at the Center, and that the special needs residents would not drive or require parking accommodations. It is expected that approximately 10 handicap parking spaces would be available within this parking lot and would be in compliance with ADA requirements. Given the use of the site, an additional 5 handicap spaces may be added.

Revised Table IV.M-10 Wellness Center Proposed Parking Spaces		
Proposed Use	**Type of Use**	**Parking Spaces**
Residential		
50 units	50 special needs individuals do not drive	0
20 units	20 live-in staff (caregivers and employees)	20
Storage	Pick-up/drop-off services	10
~~Community Center (pool and fitness center)~~	~~Guests~~	~~33~~
Services (laundry, dog grooming, maintenance/janitorial)	Pick-up/drop-off services	10
	Total of Parking Spaces Above	40
	Total Proposed Parking Spaces	~~73~~ 50

All project-associated parking would be provided on-site, would follow appropriate County parking requirements, and the parking exception request would be subject to County approval; therefore, the project would not result in inadequate parking capacity and impacts would be less than significant and no mitigation measures are required.

V.N Utilities

Page IV.N-3 (Granada Sanitary District)

The section is revised to refer to pump stations using naming conventions used by GSD (overall content and analysis does not change).

Granada Sanitary District

The project site lies within the boundaries of Granada Sanitary District, which provides sewer and solid waste services to the communities of El Granada, Princeton, Miramar, and the northern portion of Half Moon Bay (Frenchman's Creek north). The Granada Sanitary District sewer system currently extends to the corner of Airport Street and Stanford Avenue, where there is a manhole that would be the probable point of connection for the project. From this manhole there is an 8-inch diameter line that runs west on Stanford Avenue, connecting to a 15-inch line on West Point Avenue, which then connects to the Princeton Pump Station located on West Point Avenue, north of Stanford Avenue. The Princeton Pump Station collects sewage from Princeton, North El Granada and Clipper Ridge. It discharges via a 6-inch force main which ties into the SAM force main located across State Route 1 (SR 1) near the intersection of Alcatraz Avenue and Sonora Avenue. This section of the SAM force main ties into an 18-inch gravity line that runs along Alhambra Avenue to the ~~El Granada~~ Portola Pump Station. This pump station serves the southern part of El Granada and Miramar. A ~~new~~ ~~Miramar~~ Naples Beach Pump Station is being designed to pump sewage from Miramar directly to the SAM gravity main that runs to the treatment plant.

When implemented, this will ~~reduce the pumping demand on the El Granada Pump Station and~~ provide improved capacity for wet weather flows.

Page IV.N-5 (On-site Sewage Disposal Systems)

The section is deleted, as there will be no on-site discharge or disposal of sewage.

Page IV.N-11 (Proposed Project)

The "Proposed Project" section is revised as follows to eliminate the drainfields and include connection to the Granada Sanitary District for the discharge of excess treated wastewater:

The proposed project would recycle all wastewater, through on-site treatment/water recycling and for use in toilet flushing, surface and solar panel washing, and agricultural irrigation. All excess treated wastewater not recycled for irrigation or toilet flushing would be ~~infiltrated through three drainfields and~~ discharged into ~~the on-site wastewater infiltration system~~ the Granada Sanitary District sewer system. During drought periods the project proposes to ration water by reducing agricultural irrigation ~~and would send the majority of the recycled water to the infiltration drainfields for groundwater recharge~~. The wastewater system and treatment alternative includes connection to the Granada Sanitary District for the discharge and treatment of all project sewage.

Page IV.N-11 (Wastewater Treatment Plant)

The proposed wastewater treatment system for the project would consist of four primary components (refer to Figures III-25 through III-27):

- Sewage collection system consisting of pipes;
- Treatment system consisting of an MBR, ultraviolet (UV)-disinfected tertiary wastewater treatment plant (with 24-hour storage tanks) and sludge treatment/handling facilities, designed to satisfy, at a minimum, state Title 22 standards for application of treated wastewater;
- Recycled water distribution for toilet flushing and irrigation;
- ~~Treated wastewater d~~Distribution system and a storage tank for operational and wet weather storage of treated wastewater; and
- Treated wastewater disposal to GSD municipal collection system. ~~through a combination of toilet flushing uses, via a subsurface drip emitter infiltration system for agricultural and landscaping irrigation uses, as well as through infiltration via three drainfields~~.

Page IV.N-12 (Treatment System)

The DEIR has been revised to clarify that any future expansion of the wastewater treatment plan would not be covered under this CEQA document, as follows:

The proposed MBR plant proposed for the project would be constructed by Enviroquip, using processes and equipment recognized by CDPH as compliant with Title 22 requirements for tertiary recycled water. The MBR is designed to utilize a single complete mix reactor in which all the steps of the conventional activated sludge process occur with a membrane filter system submerged in the reactor. The membrane filter system filters the water continuously from the reactor by the suction of a pump. For the proposed project, the system will include initial screening of influent, an anoxic basin, and a pre-aeration basin ahead of the MBR basin. The filtered water from the MBR will then pass through an ultra-violet (UV) light disinfection system as the final step in the production of recycled water. The applicant proposes to build a treatment plant sized to handle double the required capacity for redundancy and to allow potential future expansion of service (any future expansion of the wastewater treatment plant would not be covered under this CEQA document). Initially, only the equipment required for the project would be installed and the additional concrete tanks for expansion would be used as the clear well for irrigation storage and dosing the infiltration field. The proposed effluent quality for the MBR plant is listed in Table IV.N-1, along with relevant standards for tertiary recycled water (i.e., Title 22).

Page IV.N-13 (Treated Wastewater Storage)

The MBR plant would include a 30,000-gallon storage tank for treated wastewater. The tank would serve to store and regulate the flow of recycled water for irrigation and toilet recycling. It would also be used for flow equalization ~~and for dosing the infiltration (leachfield) system~~. Separate submersible pumps would be provided for the toilet flushing and irrigation dosing systems. As the storage tank reaches capacity, the water would be pumped to the Granada Sanitary District system ~~infiltration system~~. This tank would also be covered with the aluminum plate system.

Page IV.N-13 (Water Recycling)

The recycled water produced by the MBR plant is proposed to be used on-site for toilet flushing within project buildings, and for irrigation of landscaping, crops and wetlands restoration areas. During the dry season the project proposes to recycle all of the treated wastewater. During the wet season, excess water would either be recycled or discharged to the Granada Sanitary District system ~~or dispersed on-site via subsurface disposal fields (leachfield)~~. Areas proposed for irrigation with recycled water include: (1) native plants used for ornamental landscaping; (2) wetlands restoration areas (initial three years only); (3) and row crops. Subsurface drip irrigation methods would be used.

Page IV.N-13 (Drainfield System)

This entire section has been deleted due to the elimination of the drainfield proposal.

Page IV.N-14 (Wastewater Recycling Flows)

The applicant estimates that approximately 16,000 gpd (out of the 26,000 gpd total) will be recycled for toilet flushing in the Office Park and the Wellness Center buildings. This is based on the assumption that the amount of water use for toilet flushing will be 70% in the Office Park (14,000 gpd) and 30% in the Wellness Center (approximately 2,000 gpd). The remaining flow of approximately 10,000 gpd of recycled water would be available for surface and solar panel washdown uses, as well as landscape and

crop irrigation~~, or for percolation via the on-site infiltration (drainfield) systems~~. Excess unused recycled water will be disposed of through the Granada Sanitary District system.

Pages IV.N-14 and 15 (System Operation and Management)

The wastewater system for the project is planned to serve the Wellness Center and Office Park properties, which will be under separate ownership. As a consequence of serving multiple discharges under separate ownership, the wastewater system will be classified a community system. However, due to the elimination of on-site discharge and disposal of sewage, the system is no longer considered a "discrete sewerage system" as defined by the RWQCB. Based on the foregoing, this section is revised as follows:

The applicant proposes to fully automate and fully alarm the MBR plant to comply with Title 22 requirements. The applicant proposes monitoring of the MBR system, including 24-hour composite sampling. Operation of the system would require a State-Certified Wastewater Treatment Plant Operator, Grade 4. It is also proposed that residents of the proposed project would provide labor and staff support for treatment plant operations, with the plan to eventually become certified operators.

The wastewater system for the project is planned to serve the Wellness Center and Office Park properties, which will be under separate ownership. As a consequence of serving multiple discharges under separate ownership, the wastewater system will be classified a community system. ~~Per the provisions of the RWQCB's "Policy on Discrete Sewerage Systems," this will require that a public entity assume legal and financial responsibility for the wastewater facilities. To comply with this requirement, the applicant proposes to either: (a) secure an agreement with Granada Sanitary District to own and operate the project wastewater facilities; (b) modify the project plans to bring all property under single ownership; or (c) obtain an exemption from the RWQCB to their requirement for a public entity for discrete sewerage systems.~~

Page IV.N-15 (Mitigation Measure UTIL-2)

Mitigation Measure UTIL-2 (Wastewater Collection System Capacity) is revised to add the last sentence as shown below:

The applicant shall either: (a) revise the project design to limit the maximum amount of sewage flow to the Granada Sanitary District sewer system to that which can be accommodated by the existing 8-inch sewer line in Stanford Avenue and the Princeton Pump Station; or (b) provide necessary expansion of the capacity of the sewer system to accommodate the addition of the expected maximum sewage flow of 26,000 gpd from the project. Any implementation of Mitigation Measure UTIL-2b would require separate CEQA review and permit review.

Pages IV.N-16 through 18 (Drainfield System)

This entire section has been deleted due to the elimination of the drainfield proposal. There are no changes to Mitigation Measure UTIL-4 on page IV.N-18, which remains relevant to the project.

Page IV.N-19 (Impact UTIL-5)

As discussed under Water Supply Impact UTIL-8, the projected volume of wastewater recycling for toilet flushing appears to have been overestimated by the project applicant. The applicant estimates that approximately 16,000 gpd of recycled water will be used for toilet flushing at the Office Park and Wellness Center. Per the discussion under UTIL-8, the corrected estimate of water for toilet flushing could be two-thirds this amount. The estimates of toilet flushing flows have been used by the applicant to estimate~~: (a)~~ the amount of recycled water available for irrigation uses~~; and (b) the total amount of wastewater flow to be disposed of by other means (i.e., leachfield beds) during the winter non-irrigation period~~. As a consequence of overestimating the toilet flushing flows, further analysis is needed to determine whether or not there are sufficient irrigation areas ~~and necessary capacity in the drainfields~~ for the corrected (larger) amount of wastewater flow. This is a ***potentially significant*** impact.

Page IV.N-19 (Mitigation Measure UTIL-5)

Mitigation Measure UTIL-5 is revised as follows:

The applicant shall revise the project plans and water budget analysis to correct the inconsistencies in the water recycling assumptions and calculations, and shall use this information to verify: (a) the adequacy of plans for irrigation uses of recycled water; and (b) the sufficiency of the ~~proposed leachfields~~ proposed landscape areas for winter season dispersal of all wastewater flow not distributed for toilet flushing. ~~This information shall be provided for review and approval by the RWQCB.~~ The project's use of treated wastewater for irrigation shall be managed and controlled to prevent changes in existing drainage and hydrology that could adversely impact the biology or hydrology of wetland habitats or result in ponding that could result in health, circulation, or structural stability problems. Prior to Planning approval of any grading permit, the applicant shall submit a report, prepared by a biologist/hydrologist to determine appropriate recycled watering levels for all seasons that is consistent with the above requirement and the revised water budget analysis. The report shall be submitted for review by the Environmental Health Division, RWQCB, and the County Planning Department. Use of recycled water for irrigation shall be monitored for two years by a biologist/hydrologist to adjust water levels as necessary based on actual site conditions.

Page IV.N-22 (Municipal Water Service)

The "Municipal Water Service" section is revised as follows, to provide additional information regarding CCWD capacity:

The main supplier of municipal water service in the project area is the CCWD, which serves approximately 18,000 people, including the unincorporated communities of Princeton by the Sea, El Granada, and Miramar, as well as the City of Half Moon Bay. CCWD obtains its water from four sources: (1) Pilarcitos Lake; (2) Crystal Springs Reservoir; (3) Pilarcitos well field; and (4) the Denniston Project. The first two sources are owned and operated by the San Francisco Water Department (SFWD); the latter two are owned and operated by CCWD. Approximately 35% of CCWD's water supply is produced locally through stream diversions and wells along Pilarcitos and Denniston Creeks, while the remaining 65% is purchased from the City of San Francisco. CCWD operates two water treatment plants, the Denniston Plant near the Half Moon Bay Airport, and the Nunes Plant in the City of Half Moon Bay.

Water from SFWD is conveyed through the Pilarcitos pipeline to the Nunes Plant, which has a capacity of 4.5 mgd, from there it is stored in ten storage tanks with a total capacity of 8.1 million gallons. Within the district there are three pressure zones, five pump stations, 500 hydrants and 52 miles of water mains. The majority of the water use in the district is for residential use, with residential customers accounting for 91% of the connections and 59% of the total water demand.

In addition to the 4.5 mgd capacity of the Nunes Plant, CCWD has approved water rights to the Pilarcitos Creek Well Field of 0.32 mgd, the Dennison Creek Diversion of 0.27 mgd and the Dennison Creek Well Field of 0.21 mgd. The total treatment capacity for CCWD is 5.3 mgd (CCWD District Map and Water Information). The current flow averages approximately 2.4 mgd. The Big Wave Project is not within the CCWD Water District Boundaries but is within the LAFCo identified sphere of influence.

Page IV.N-30 (San Mateo County Local Agency Formation Commission)

The "San Mateo County Local Agency Formation Commission" section is amended as follows, in order to analyze the option of a full water connection to CCWD for domestic and fire flow, consistent with the Project Description in the DEIR:

The project site is not within the district boundaries of a domestic water supplier, which would require annexation via Local Agency Formation Commission (LAFCo) if the project was to receive backup services. The project applicant proposes to connect to the CCWD for emergency water supply and fire flow. The project applicant also proposes to connect to CCWD for domestic water supply once the Project is annexed into the District and is the necessary coastal development permit amendments required to allow for such service have been issued. This proposed annexation to CCWD would require review and approval by LAFCo and Coastal Commission approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project~~. Any temporary or permanent extension of water services outside of the service boundary as defined on January 1, 2003 would require amendments to~~ (Coastal Development Permits A-1-HMB-99-20 and A-2-SMC-99-63~~) as well as amendment(s) to the County of San Mateo and Half Moon Bay Local Coastal Plans~~. LAFCO annexation would require:

(The rest of the section is unchanged)

Page IV.N-31 (On-site Well Water)

The "On-site Well Water" section is revised as follows, in order to delete the originally proposed RO well waster treatment and to provide additional information regarding the treatment of well water:

~~T~~Unless and until the project can obtain water from CCWD, the primary source of domestic water supply would be the existing on-site agricultural well. It would be converted to provide potable water for the project, and would also continue to be used to supply a portion of the irrigation needs for wetlands restoration, native plant nursery, and start-up ornamental nursery. ~~The water used for the domestic supply would be treated with membrane micro-filtration (two 10,000 gallons per day (gpd) AMPAC Reverse Osmosis (RO) systems), followed by ultra-violet (UV) light disinfection (Trojan). One treatment unit would be located in the Storage Mechanical room on the first floor of the Wellness Center (Building 1), and the other would be located in the Communications Building at the Office Park property. For redundancy the two systems would be interconnected with a 4-inch pipe. The RO system would be fully~~

~~automatic with continuous turbidity readings and alarmed shutdown. The water treatment system would remove salt, minerals, organic pollutants and pathogens. The applicant proposes water treatment to assure the quality of domestic water supply in the event that future testing reveals contaminants in the well water.~~

The on-site domestic water system includes a well permitted and installed in 1987 with a sustained capacity of 34 gallons per minute (49,000 gallons per day).[5] The well water will be treated with ozone for iron and manganese removal and disinfection. The peak average demand for the project is 10,000 gallons per day (11 acre feet per year) requiring the well to operate about 20% of the time. The well will be operated with a backup pump and emergency power. Water at the well after treatment will meet the standards of the Safe Water Drinking Act in Accordance with Title 22. The treated water will be distributed to each building. The building hookups will be 1 inch with a 5/8-inch meter. The buildings will include 6,000-gallon storage tanks to provide backup supply with booster pumps to meet peak flow capacity. Each storage and booster pump system will circulate through a filtration system and UV disinfection to maintain water quality. The filtration system will be designed to provide potable water meeting the specific quality requirements of the user.

Page IV.N-32 (Recycled Wastewater)

The "Recycled Wastewater" section is revised as follows, in order to provide additional information regarding the on-site wastewater treatment and recycling system:

Recycling water within the building reduces the total water demand for building use within a range of 9,000 to 16,000 gallons per day. The water recycling system is designed to recycle and utilize all of the potable water extracted from the well. The water recycling system is not an on-site sewage disposal system. The connection to Granada Sanitary District is the on-site sewer system.

The water recycling system is comprised of a Membrane Bioreactor (MBR) with Ultraviolet Disinfection, 24 hours of influent and effluent storage provided for each building. Recycled water will comply with Title 22 for unrestricted use. The design for MBR system is attached to this FEIR as an addition to Appendix K of the DEIR. The design prepared by Enviroquip based on a 0.1 and 0.25 mgd plant. The MBR is scalable, where each plant is designed to accommodate 15,000 gallon per day. One plant of this size would be required for the Wellness Center and two plants of this size would be required for the Office Park.

~~The proposed project would recycle all wastewater for toilet flushing and irrigation.~~ The water system is designed to provide recycled water for building toilet flushing, solar panel washing and surface cleaning. Recycled water will also be used for landscape irrigation, wetlands restoration and organic farming. All recycled water for irrigation will be applied as subsurface drip irrigation.

For toilet flushing the recycled water would be supplied in a separate system of water pipes (dual plumbing) in accordance with State requirements for water recycling (refer to Sewer sub-discussion). All

[5] *Pump test performed in 2009 and signed by the County Environmental Health Division, demonstrated well capacity of 49,000 gallons per day.*

areas receiving recycled water for irrigation would also require a piping system separate from any domestic water supply system or raw well water piping. Recycled water is expected to fulfill the bulk of irrigation needs, but could be supplemented with well water. ~~Excess recycled water not used for toilet flushing or irrigation would be percolated into the ground via three drainfields (leach fields) on the site for groundwater recharge.~~

The water recycling system will be comprised of a pressurized 6-inch pipe as shown on the tentative subdivision drawing. The storage capacity of the on-site recycled water storage tank provides additional flexibility for the use and storage of excess treated wastewater. At peak development, there will be approximately 40,000 gallons of recycled water storage on site in interconnected 6000 gallon buried tanks. Water storage capacity is divided among the following uses:

- The lower 10,000 gallons (first priority) of storage is reserved for toilet flushing and surface and building wash down. Pumps and valves for the toilet flushing will open at the bottom level of the storage system and shut off when there is no demand.

- The next 10,000 gallons per day (second priority) will be reserved for organic farming during the summer only. Pumps and valves open at the 10,000-gallon level and shut off in the rainy season or when there is no demand.

- The remaining 20,000 gallons of storage will be reserved for wetlands and uplands restoration. Pumps and valves open when the storage tank exceeds 20,000 gallons.

When the recycled water volume exceeds 40,000 gallons, it will spill over into the GSD system. It should be noted that the influent storage before the recycled system will be 24,000 gallons. The influent storage tanks will be operated normally empty with all sewage flowing to the recycling systems.

Any excess recycled water or water not meeting Title 22 standards will be discharged into the GSD sewer system. All flow to the GSD system will be metered and recorded continuously. It is estimated that a connection providing a total of 8 EDUs will be purchased for emergency and excess discharge into the GSD system. The size of the connection is 8 inches.

Page IV.N-32 (Annexation to CCWD)

The "Annexation to CCWD" section is revised as follows, in order to analyze the option of a full water connection to CCWD for domestic and fire flow, consistent with the Project Description in the DEIR:

The project proposes to annex to the CCWD for provision of water to meet fire flow requirements and as emergency backup supply for domestic needs. Annexation to CCWD for domestic water service is also proposed, pending approval by LAFCo and Coastal Commission approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project (as described on page IV.N-30). The project is not presently within the CCWD service area, and would require annexation approval by San Mateo County LAFCo. The nearest CCWD main is located at Stanford Avenue and Airport Street. The proposed Wellness Center indoor swimming pool would provide supplemental, backup storage for fire service water.

Page IV.N-32 (Facilities)

The "Facilities" section is amended as follows, in order to analyze the option of a full water connection to CCWD for domestic and fire flow, consistent with the Project Description in the DEIR:

An on-site water distribution system would also be provided under the project (refer to Figures III-24 and III-25). The potable water supply would include a 6-inch waterline distribution system. This system would distribute water from the CCWD or treated groundwater for potable use. Recycled water would be distributed in a separate 6-inch waterline for irrigation and/or toilet flushing. Reduced pressure backflow preventers would be provided for all potable and CCWD connections. The potable water system for each building in the Office Park and Wellness Center would be fed by 5/8-inch diameter metered waterlines to ~~six 1~~ one 6,000-gallon hydro-pneumatic tanks. The hydro-pneumatic tanks would minimize potable flow requirements to reduce the meter sizes or reduce the size of the water treatment facilities.

As mentioned previously, CCWD would provide fire service water, and ultimately domestic service, with the proposed Wellness Center indoor swimming pool or storage tank ~~storage~~ serving as backup fire service water. The fire water suppression system would be designed by a licensed Fire Suppression Engineer. The on-site fire distribution system would most likely be an 8-inch to 12-inch main at 150 pounds per square inch (psi), capable of delivering 2,000 gallons per minute (gpm) at a minimum pressure of 30 psi for 30 minutes. Booster pumps in a pump well located in the parking lot and directly powered from an emergency generator would be designed to provide supplemental fire flow. This system would provide either primary or secondary fire flow.

Page IV.N-33 (Landscape Irrigation Water Demand)

The "Landscape Irrigation Water Demand" section is revised as follows, to add approximately 4000 trees and about 6000 shrubs, to provide additional uplands restoration, which acts as a visual and noise buffer.

Landscape Irrigation Water Demand

~~The proposed project documents (Facilities Plan24) discuss plans for irrigated landscaping; however, no estimate is provided regarding the amount of landscaping and the associated irrigation water demand. The EIR analysis assumes that landscaping would be matched to the amount of available recycled water.~~ Table III-6 of the DEIR shows approximately 44% of the site in restored wetlands. On-site wetlands restoration and habitat created by landscaping is described in Figure 6 (Planting Plan) of the DEIR and the "90% Basis of Design - Riparian and Water/Wetlands Ecosystem Restoration" added to Appendix E of the DEIR. Approximately 39,000 plants to be installed over both of the project sites. Of this number, approximately 9,500 are wetlands trees. These numbers include additional landscaping over the uplands of the properties proposed by the applicant after the release of the DEIR, consisting of approximately 4,000 trees and about 6,000 shrubs, to provide additional wetlands habitat and uplands restoration, to act as a visual and noise buffer.

The uplands restoration will be planted primarily with wetlands trees and shrubs in accordance with the Palustrine Scrub Shrub I and II Palustrine Forest I, as described in the "90% Basis of Design" report. Uplands are defined as greater than 2 feet above the wet season water table. This tree selection maximizes the biological benefits of the restoration and will be contribute to visual and sound screening.

Proposed planting has been sized and designed to utilize all the recycled water produced by the project that is not used for toilet flushing, approximately 5,000 to 17,000 gallons per day. The wetlands plants require saturated soil conditions all year long. To saturate the soil during the summer, about 0.2 gallons per day is required per shrub and about 0.5 gallons per day is required per tree (refer to Appendix K of the DEIR, as revised in the FEIR). Based on this estimate, the restoration will take approximately 16,000 gallons of water per day for a successful restoration. The drip irrigation system is designed to provide water in circuits to saturate the soil but not flood the soil. The wetlands restoration will be watered with a minimum of 6 circuits, allowing watering for each circuit once every 6 days to allow the soil to drain. The wetlands restoration will receive irrigation during the dry months for approximately 10 years.

New Table IV.N-3
Approximate[1] Plant Recycled Water Demand (Dry & Wet Season)

Landscaping	Total No.	Approximate Recycled Water Needs per Plant (gpd)	Approximate Total Recycled Water Demand (Dry Season) (gpd)	Approximate Total Recycled Water Demand (Wet Season) (gpd)
Wetlands				
Trees	5,500	0.5	2,750	--
Shrubs	13,500	0.2	2,700	--
			5,450	
Uplands				
Trees (wetlands)	4,000	1.0 - 2.0	4,000	8,000
Shrubs (wetlands)	6,000	0.25 - 0.5	1,500	3,000
			5,500	*11,000*
Organic Garden/Native Plant Nursery				
Plants	10,000	0.5	5,000	5,000
Total Wetlands Trees	**9,500**			
TOTAL	**39,000**	**--**	**16,000**	**16,000**

[1] The table represents approximate recycled water demand. Actual use of recycled water may be higher or lower, varying with the amount of recycled water used for toilet flushing. No potable water would be used for plant watering.

GPD = Gallons per day

Source: Appendix K of the DEIR, as revised in the FEIR

Page IV.N-33 (Impact UTIL-7)

Impact UTIL-7 (New Water Facilities or Expansion of Existing Facilities) is revised as follows, in order to analyze the option of a full water connection to CCWD for domestic and fire flow, consistent with the Project Description in the DEIR:

As part of the building permit process, the project will be required to have a fire safety engineer calculate the fire flow requirements for the project. If the tested flow is determined to be inadequate, the project would be required to increase the building fire proof rating and/or provide storage and booster pumps. The project proposes to obtain its main supply of water via an existing on-site well and annexation and connection to the CCWD as a backup emergency domestic supply and for fire flow water service. Annexation to CCWD for domestic water service is proposed pending approval by LAFCo and Coastal Commission approval of amendments to the Coastal Development Permits for the El Granada Pipeline replacement project.

The San Mateo County General Plan anticipates that the CCWD could serve a population of roughly double the current customer base, which would allow sufficient supply for the proposed development without requiring the CCWD to expand existing facilities or construct new facilities. According to an October 12, 2010 phone conversation with Joe Guistino, Superintendent, ~~T~~the existing CCWD 10-inch water main near the project site (Stanford Avenue and Airport Street) is estimated to have the capacity to ~~deliver the necessary fire flow to~~ meet the domestic water and fire flow demands of the project~~, based on preliminary estimates of fire flow needs~~. While the project has yet to apply for and gain LAFCo approval for annexation to CCWD, if annexation is approved, the impacts on existing water treatment facilities by the proposed project would be a less than significant impact; therefore, no mitigation measures are required.

Page IV.N-34 (Fire Flow)

The "Fire Flow" section is revised as follows, in order to reflect the clarification of fire flow options listed in Section III.A of the FEIR:

Fire Flow

The quantity of water necessary for fire protection varies with the type of development, occupancy, and the degree of fire hazard. The adequacy of fire flow for a given area is based on required fire flow, response distance from the existing fire station, and the Fire Marshal's judgment of needs in the area. Required fire flow is directly related to land use. The preliminary estimate of fire flow requirements for the project is 2,000 gpm, at a minimum pressure of 30 psi for 30 minutes (60,000 gallons or more). The CCWD main located at Stanford Avenue and Airport Street is capable of delivering this flow. On-site facilities to distribute the water for fire protection are estimated to include an 8-inch diameter main. If the on-site swimming pool or below-ground storage tank will be used as a source of fire flow water, and will accommodate a storage capacity of 60,000 to 90,000 gallons and require a booster pump with capacity to deliver the above mentioned flow of 2,000 gpm through the distribution system.

Water supply for fire protection will be rely one of the following sources as approved by the Coastside County Fire District.

1. On-site water storage for fire protection: On-site water storage would involve the Wellness Center swimming pool, with submersible pump well, and/or a below-ground water storage tank (capacity up to 180,000 gallons or as otherwise required by Coastside County Fire Protection District at the building permit stage).

2. Combination of On-site Water Storage and Water Connection for Fire Service only: The system includes an emergency connection to CCWD that can be energized through a valve with a reduced pressure backflow preventer and meter if the on-site fire system has problems or is inadequate.

3. Water Connection for Domestic and Emergency Service: This option would rely entirely upon a municipal water connection, if and when a connection is available and has been approved, for both domestic and fire suppression purposes.

Swimming Pool or Below-Ground Storage Tank For Fire Flow

The pool size will be determined by the fire flow and the required duration of flow. A sixty-minute flow will require approximately 120,000 gallons. The pool will be a minimum of four lanes, zero entry operated with a mild salt solution similar in concentration to the body salt levels (0.9%). The pool will be designed to continuously circulate through a sand or diatomaceous filter. The filtered water will be treated with UV light for disinfection. The pool will have a large grated intake trough for circulation connected to a submersible pump well located within the parking lot. The grated intake will be sized to maintain velocities of less than 1 ft per second during fire flow to maintain safety for swimmers. The submersible pump well will also have four fire pumps designed to deliver the required flow and pressure. Two smaller pumps will maintain the fire system under pressure. The larger pumps will turn on if the system pressure drops. The pumps will be powered by a backup natural gas generator. The main fire line will be twelve inches and provide connections to the building sprinkler systems and hydrants required by the fire system design as reviewed by the third party system design engineer approved by the Coastside County Fire Protection District (Fire District).

The pool will consist of a reinforced concrete tank six feet deep that will be constructed partially below the water table. The pool will require a slab that is tied down to drilled piers. The pool cannot be drained due to outside water pressure. Pressure relief valves will let outside ground into the pool if the pool level drops. Continuous treatment will insure the water meets the County Health department standards. If someone is sick or defecates in the pool, the pool will be closed until the pool treatment system returns the pool to its required water quality standards. The pool is a dedicated fire system maintained in a manner that allows safe swimming.

If the Fire District determines that the pool with its pressurization system cannot be used for fire protection, a separate concrete tank will be provided or the pool will be closed and covered and swimming will not be allowed. If a separate tank is required, it will be located under the first floor of the Wellness Center or under the pool area concrete deck. All tanks will be located within the building footprint.

Pages IV.N-36 and 37 (Impact UTIL-9)

Impact UTIL-9 (Adequacy of On-site Water Well) is revised as follows, as the County Environmental Health Division has stated that extension of the existing 20-foot well seal to 50 feet is not required to meet requirements for a community water well:

The applicant proposes to meet the Safe Drinking Water Act by proposing a water treatment system that meets the San Mateo Department of Health Standards ~~extend the existing 20-foot well seal to 50 feet to meet requirements~~ for a community water well.~~, which will alter the hydraulic characteristics of the well. Specifically, half of the existing well screen (from 20 to 50 feet) will be sealed off, leaving the screened sections only between 50 to 60 feet, and from 80 to 100 feet. This will materially alter the production capacity of the well, such that the results of the recently completed pumping test are no longer valid. The production capacity of the existing on-site well would be expected to decline. Consequently, the EIR assumes that a repeat pumping test will be required by the County for the modified well to document its adequacy to meet project water demands. It is not possible to determine whether or not the modified well will have sufficient production capacity to meet project demands. However, if the modified well is found to be insufficient, the capacity could be supplemented with an additional well to meet the project demands. Review of the well log indicates suitable aquifer conditions to support the water demands for the project. The water quality for the existing on-site well is satisfactory and would not be expected to change with the proposed modification of the well seal. Provision of potable water from the on-site well represents a less than significant impact.~~ Provision of potable water from the on-site well and treatment system represents a less than significant impact.

Page IV.N-37 (Impact UTIL-10)

The project includes treatment to improve well water quality that includes microfiltration and UV disinfection. The RO treatment discussed in the DEIR is no longer part of the treatment process. As stated on page IV.N-37 of the DEIR, based on the June 2009 testing of the existing well water, the water quality is suitable for domestic-community water supply, without the need for RO treatment. The observed high levels of color, iron and manganese could be addressed with conventional water treatment methods. Based on the foregoing, Impact UTIL-10 (Water Treatment System) is revised as follows:

The project proposes to employ an ~~RO treatment~~ aeration-system, slow sand filter and UV disinfection to treat well water for the potable water supply. The treatment system has been proposed to meet the requirements of the Safe Drinking Water Act and ~~in order~~ to assure high quality water for the project facilities, residents, employees and guests. Based on the June 2009 testing of the existing well water, the water quality is suitable for domestic-community water supply, without the need for RO treatment. The observed high levels of color, iron and manganese could be addressed with conventional water treatment methods. The proposed ~~RO~~ system exceeds the treatment needs for the project. Therefore, water treatment is a less than significant impact and no mitigation measures are needed.

Page IV.N-37 (Cumulative Impacts)

The "Cumulative Impacts" section is revised as follows, in order to analyze the option of a full water connection to CCWD for domestic and fire flow, consistent with the Project Description in the DEIR:

Under the primary option, ~~T~~the proposed project would obtain its domestic water supply entirely from an on-site well rather than from the CCWD (or District) public water supply. Under this scenario, ~~T~~the project proposes on-site water supply for fire protection (e.g., Wellness Center swimming pool or below-groundwater tank), and, if necessary, to connect to the CCWD solely for the purposes of providing fire protection, which would not amount to a significant annual water demand. Under a secondary option, the applicant proposes to apply to LAFCo to annex the project site to CCWD consistent with the District's LAFCo adopted sphere of influence for domestic water and fire supply, and to work with the CCWD to apply to the Coastal Commission for the amendments to the Coastal Development Permits for the El Granada Pipeline replacement project necessary to allow the project to be served by CCWD. Under this scenario, the property owner would either abandon the on-site water treatment facilities consistent with County standards, or provide CCWD with the on-site water facilities to increase CCWD's domestic water supply, if desired by CCWD and allowed by the amendments to the CDPs for the pipeline replacement project. Therefore, the project would not have a cumulative effect that would diminish the availability of water supply for other projects in CCWD service area. Cumulative water supply impacts would be less than significant.

Pages IV.N-56 and 57 (Proposed Project)

As described in detail in Section III (Project Description), the proposed project would supply a majority of energy for heating, cooling and electrical demand with renewable energy, through a combination of off-site and on-site power generation. The potential on-site power systems include solar heat, photovoltaic panels, wind generation, backup ~~and cogeneration~~ with a natural gas generator ~~for peak shaving~~ and geothermal cooling. Passive heating and cooling would also focus on the proposed development architectural design. Buildings would be heated by ~~either natural gas or~~ solar power. Additionally, the electrical equipment cooling process would be a source of building heating. Natural gas fuel cells would be utilized for the backup of communications power. All buildings and development would be designed to meet Platinum-level Leadership in Energy and Environmental Design (LEED) certified construction.

The proposed project would include up to 600 kilowatts (kW) of solar voltaic, one to three million British thermal units (BTU) per hour of solar heating, one million BTU per hour of geothermal/evaporative cooling, and up to 100 kW of wind power. The project would also own and operate up to a 600 kW natural gas engine generator used for backup power ~~designed for peak shaving~~ and 5 kW of natural gas fuel cells for backup communications.

Page IV.N-59 (Natural Gas)

Revise the "Natural Gas" section under Cumulative Impacts as follows:

Under a worst-case scenario, which does not account for proposed energy conservation measures, i~~I~~mplementation of the proposed project in combination with the 37 related projects and other future cumulative growth in unincorporated San Mateo County would increase the consumption of natural gas.

As shown in Table IV.N-7 the projected cumulative increase in natural gas consumption would be approximately 78,891,34 cubic feet per month (cfm), or 78.89 million cfm under this scenario.

V. GENERAL IMPACT CATEGORIES

Page V-2 (Growth Inducing Impacts of the Proposed Project)

The second full paragraph on this page is revised, as follows, to be consistent with the Project Description of the DEIR, which states that one of the project options for domestic water supply is a connection to CCWD:

Surrounding land uses include the Half Moon Bay Airport and County of San Mateo open space across Airport Street to the east, the El Granada Mobile Home Park adjacent to and north of the project site, the Pillar Point Marsh to the west, and the Princeton/Pillar Point Harbor industrial/commercial area adjacent to and south of the project site. The project site is served by existing roadways and an on-site well that has been used for agricultural purposes.~~, utility infrastructure, and service systems.~~ The proposed project would recycle all wastewater through on-site treatment/water recycling and for use in toilet flushing and landscaping and agricultural irrigation. All excess wastewater not recycled for irrigation or toilet flushing would be disposed of through the Granada Sanitary District system, within the existing wastewater disposal allocation of 8 EDUs. ~~infiltrated through three drainfields and discharged into the on-site wastewater infiltration system~~. Proposed domestic water supply for the project would be obtained through one of the following options:

1) The generation of treated domestic water on-site via existing groundwater wells, with on-site water supply storage for fire protection,

2) On-site treated domestic water via existing groundwater wells, with ~~, as well as through the~~ a connection to CCWD to provide water supply for fire flow ~~as an emergency backup.~~ ,~~-~~or,

3) Full connection to CCWD for domestic and fire water supply.

~~Additionally, the proposed project would not require new or expanded water entitlements.~~ The first and second options would require Coastal Development Permit approval for the use of the existing agricultural well for domestic purposes. The second and third options that include domestic and/or fire water supply will require LAFCo approval for annexation of the project sites to CCWD consistent with the District's LAFCo adopted sphere of influence. These options would also require CCWD to amend Coastal Development Permits, subject to approval of the Coastal Commission, to serve the project.

The use of the on-site well would not be growth inducing as it is consistent with the County's current proactive to allow on-site wells in urban areas where municipal connection are not available and County Environmental Health Division requirements are met.

Amendment of service district boundaries is not growth inducing, as the project site is in the CCWD sphere of within the LCP Urban Service Line. The provision of municipal water to sites that are currently eligible for domestic connections is not growth inducing.

Ox Mountain Landfill has sufficient capacity to meet the solid waste service demands of the proposed project. The project proposes to recycle a minimum of 50% of its solid waste, with a goal to recycle 95% of its solid waste. The proposed project would have sorting/recycling centers for plastic, paper, glass, cans and metal, which could be collected by Seacoast Disposal. The proposed project would not require the expansion of landfill capacity. Therefore, the proposed project would not foster population growth by removing an obstacle to growth.

VI. ALTERNATIVES TO THE PROPOSED PROJECT

Pages VI-16 through 20 (Alternative C)

Alternative C has been modified to further reduce environmental impacts, which were considered less than significant. The 225,000 sq. ft., two-story, four-building Office Park alternative has been revised to maintain the total size over 8 buildings, with four two-story buildings in the front row (along Airport Street) and four three-story buildings in the back row (directly behind the front row). Also, a traffic option has been added to the alternative which would prohibit Office Park traffic (construction-related and operational) in residential areas north of the project site along Airport Street and Cypress Avenue. The section is revised as follows:

Alternative C of the FEIR includes 8 closely clustered buildings and maintains the size of the proposed offices at 225,000 sq. ft. Compared to the four-building proposal, the alternative includes a greater number of smaller buildings to be more consistent with nearby buildings in Princeton. The layout allows for pedestrian walkways and small plazas between structures as well as loading bays on the perimeter of the buildings.

Alternative C reduces the building height of the Office Park from four three-story~~ies~~ buildings to four two-story~~ies~~ buildings in the front row (along Airport Street) and four three-story buildings in the back row (directly behind the front row). ~~but maintains the size of the proposed offices at 225,000 sq. ft.~~ Each building footprint and floor has an area of 11,250 sq. ft., with a building floor area of 22,500 sq. ft. for the two-story buildings and 33,750 sq. ft. for the three-story buildings. ~~As a result, t~~The building footprint for the Office Park would increase from 80,000 sq. ft. under the proposal to approximately ~~113,000~~ 90,000 sq. ft. under this alternative. These changes to the project under Alternative C would also result in a reduction of the wetlands restoration from 226,038 sq. ft. to approximately ~~192,000~~ 216,000 sq. ft. However, the same amount of parking spaces as the project would be provided under Alternative C. This alternative also includes an Office Park traffic circulation option that prohibits project operational or construction-related traffic on Cypress Avenue. This option includes the installation of on and off-site signage and physical improvements in the right-of-way, subject to County Department of Public Works approval, that would prohibit right turns into the site from south-bound Airport Street and left turns onto Airport Street for traffic leaving the project site. A discussion of potential environmental impacts of modifications to Alternative C is included in Section III.C (Environmental Analysis).

No changes are proposed to the Wellness Center as a part of this alternative.

Except as described above, other project characteristics are assumed to be generally similar to those of the proposed project, for the purpose of analyzing Alternative C. These characteristics include but are not limited to the general location, design and building materials and colors; the specific land uses and tenant types; Platinum level LEED certification, utilities and on-site power generation; on-site farming~~;~~ and grading~~; and phasing~~. Construction of the Office Park would continue to be phased based on economic demand for mixed office space, however, the smaller size of the buildings would allow for smaller increments of construction than the proposed project.

The potential environmental impacts associated with this alternative are described below and are compared to the significant environmental impacts associated with the proposed project. All applicable mitigation measures recommended for the proposed project are incorporated into Alternative C.

AESTHETICS

While the lot coverage for the Office Park parcel would increase under Alternative C by 13%, the building heights for the four office buildings would be reduced from four, three-story~~ies~~ buildings to four two-story~~ies~~ buildings in the front row (along Airport Street) and four three-story buildings in the back row (directly behind the front row). Breaking up the mass of the four larger buildings into eight smaller buildings separated by common areas reduces the appearance of mass and scale and allows for clustering and variation in roof lines. Therefore, the project would more closely resemble nearby buildings in Princeton and project conformance to the County Design Review (DR) Zoning District Regulations for the Coastside would be improved. Under this Alternative, Office Park building facades would also be re-designed to improve project conformance to the County Design Review (DR) Zoning District Regulations for the Coastside. Renderings of the new design overlays are provided in Figure E of the FEIR.

Due to the lower height of the four buildings in the front row, three-story buildings in the back row would be almost entirely screened by the proposed landscaping and the front row of two-story buildings. Where the proposed project would have been visible from Airport Street/Stanford Avenue and Highway 1 with mature landscaping, under this scenario, the buildings would be less visible from these locations. As a result, there would be fewer impacts to scenic views, scenic resources, and visual character than the project under Alternative C, all of which were found to be less than significant with implementation of the proposed project. Like the project, light and glare impacts associated with Alternative C would be less than significant after mitigation.

AGRICULTURE RESOURCES

Given that the same amount of square footage and units would be developed under both Alternative C and the project, the majority of the existing farming on-site would be replaced by this alternative and the project. The project site is depicted as Urban and Built-up Land and Other Land on the Important Farmland Map for San Mateo County. Therefore, the project site has not been designated as important farmland and development of the site would not involve conversion of important farmland. Thus, Alternative C would result in similar impacts to agriculture resources as the proposed project, which was found to be less than significant.

AIR QUALITY

Alternative C would result in similar air emissions compared to the project because Alternative C involves the same square footage and units as well as vehicle trips. Similar to the project, Alternative C would result in significant but mitigatable impacts related to construction emissions and objectionable odors. Also similar to the proposed project, Alternative C would result in less than significant air quality impacts related to: consistency with Air Quality Plan, operational emissions, cumulative regional operational emissions, ~~sensitive receptors,~~ and greenhouse gas emissions. Implementation of the Office Park traffic circulation option, which would prohibit Office Park traffic in residential areas north of the project site along Airport Street and Cypress Avenue, would reduce vehicle-related emissions to sensitive receptors in these residential areas.

BIOLOGICAL RESOURCES

Under Alternative C the building footprint for the Office Park would increase from 80,000 sq. ft. to approximately ~~113,000~~ 90,000 sq. ft., resulting in a reduction of the wetlands restoration from 226,038 sq. ft. to approximately ~~192,000~~ 216,000 sq. ft.. Therefore, Alternative C would result in decreased benefits to wetlands than the proposed project. However, similar to the project, Alternative C would result in less than significant impacts related to: special-status plant species, sensitive natural communities, wildlife movement and habitat connectivity, and conformance with policies and ordinances related to the protection of biological resources. Likewise, Alternative C would also result in significant but mitigatable impacts related to special-status wildlife species.

CULTURAL RESOURCES

Approximately the same amount of grading would occur under Alternative C compared to the project. As a result, cultural resources impacts associated with Alternative C would be similar to those associated with the project. Such impacts include less than significant historical resources impacts, and significant but mitigatable impacts related to archaeological resources, paleontological resources, and human remains.

GEOLOGY AND SOILS

Geology and soils impacts associated with Alternative C would be similar to slightly less compared to the project because both Alternative C and the project would result in grading and development of most of the site. The slight difference in impacts is attributed to Alternative C involving one fewer building story for each of the four buildings in the front row, and thereby fewer occupants exposed to geology and soils hazards at the Office Park. Overall and similar to the project however, Alternative C would result in less than significant impacts related to exposure of Office Park and Wellness Center occupants to fault rupture and seismic ground shaking, and significant but mitigatable impacts related to other soil/geologic instabilities (i.e., seismic-related ground failure, total and differential settlement, soil erosion, expansive soil, and surface weakness associated with pervious pavements).

HAZARDS AND HAZARDOUS MATERIALS

Implementation of Alternative C would result in less than significant impacts related to the routine use, transport and disposal of hazardous materials, similar to the project. Alternative C would also result in less than significant impacts related to interference with emergency plans, and the project's less than

significant impacts related to wildfires. Also, Alternative C would result in significant but mitigatable impacts related to accidental release of hazardous materials and airport operations, which is also similar to the impacts associated with the project.

HYDROLOGY AND WATER QUALITY

Increased building footprints and a loss of restored wetlands at the Office Park under Alternative C would result in a greater amount of impermeable surfaces on the site compared to the project. As a result, hydrology and water quality impacts associated with Alternative C would greater than those associated with the project. However, both Alternative C and the project would result in less than significant impacts related to violation of water quality standards, depletion of groundwater supply and recharge, surface water runoff quantity, and flood hazards. Alternative C and the project would also result in significant but mitigatable impacts related to the alteration of drainage patterns, surface water runoff quality, and tsunami and seiche.

LAND USE AND PLANNING

Land use and planning impacts associated with Alternative C would be similar to the proposed project because both scenarios involve the same amount of square footage and development as well as the same land uses and discretionary actions. Both Alternative C and the project would result in less than significant impacts related to the division of an established community and conflict with plans and policies.

NOISE

Alternative C would result in ~~increased~~ similar impacts related to construction noise and operational traffic noise to sensitive receptors at the Mobile Home Park to the north because it involves the location of buildings and therefore construction in ~~closer~~ similar proximity to adjacent residential uses.~~, due to increased building footprints.~~ This alternative would result in significant but mitigatable impacts related to construction noise and ground-borne vibration, similar to the project. Like the project, Alternative C would also result in less than significant operational noise impacts.

POPULATION AND HOUSING

Under Alternative C, the Wellness Center would include the same amount of DD residents and staff and the Office Park would include the same amount of employees. As such, Alternative C would result in similar population and housing impacts as the proposed project. Specifically, Alternative C would also result in less than significant impacts related to inducing substantial population growth and related to the displacement of substantial amount of population.

PUBLIC SERVICES

Police

Because there would not be a change in population as a result of Alternative C compared to the project, demands for police protection services under this alternative would be similar to the proposed project, which were found to be less than significant.

Fire Protection

Because there would not be a change in population as a result of Alternative C compared to the project, demands for fire protection services under this alternative would be similar to the proposed project, which were found to be less than significant with mitigation.

Schools

Because there would not be a change in population as a result of Alternative C compared to the project, demands for schools services under this alternative would be similar to the proposed project, which were found to be less than significant.

Parks and Recreation

Because there would not be a change in population as a result of Alternative C compared to the project, demands for parks and recreation services under this alternative would be similar to the proposed project, which were found to be less than significant.

Libraries

Because there would not be a change in population as a result of Alternative C compared to the project, demands for library services under this alternative would be similar to the proposed project, which were found to be less than significant.

TRANSPORTATION/TRAFFIC

Section IV.M (Transportation/Traffic) of the DEIR found that the proposed project would result in less than significant impacts related to traffic hazards, access and on-site circulation, emergency access, parking, transit service, and pedestrian and bicycle facilities. However, due to concerns regarding the potential impacts of construction and Office Park traffic on Cypress Avenue, the off-site traffic circulation for the project has been revised to offer an option to prohibit project operational or construction-related traffic on Cypress Avenue. Under this option, both project traffic and construction traffic would be prohibited from accessing the site from Airport Street north of the project site. Therefore, for project traffic, the site would be accessed using North or South Capistrano Road to and from Cabrillo Highway. Construction trucks would access the site using North Capistrano Road to and from Cabrillo Highway. Revisions to the traffic site plan associated with this option include on-site signs prohibiting traffic from making a right turn when entering the site and a left turn when exiting the site, as well as modifications within the public right-of-way to prevent such turns.

This traffic circulation option would re-route Office Park employees who live (or need to travel) north of the project site (Moss Beach, Montara, Pacifica, etc.). Instead of utilizing the Cabrillo Highway to Cypress Avenue to Airport Street route, Office Park employees coming from the north would utilize the

Cabrillo Highway to North Capistrano Road to Prospect Way to Broadway to Cornell Avenue/Yale Avenue/Harvard Avenue to Airport Street route and the same route in reverse when returning home. The optional traffic route includes only non-residential streets.

As shown in Figure D of the FEIR and described in detail in Appendix G, this traffic circulation option would result in reduced project impacts to local intersections which are largely residential, these being Cypress Avenue at Cabrillo Highway (Study Intersection 6), Airport Street at Los Banos Avenue (Study Intersection 5), and Airport Street at La Granada Avenue (Study Intersection 4), but may increase potential project impacts (under cumulative and non-cumulative scenarios) to non-residential intersections. Non-residential intersections potentially impacted by the optional traffic circulation are Cabrillo Highway at North Capistrano Road (Study Intersection 8), Prospect Way at Capistrano Road (Study Intersection 1), Prospect Way at Broadway/Cornell Avenue (Study Intersection 2), and Airport Street at Stanford Avenue/Cornell Avenue (Study Intersection 3).

However, as stated in Section III (Corrections and Additions to the Draft EIR) of this FEIR, the applicant proposes Traffic Demand Management (TDM) measures to include an off-site parking agreement and shuttle service to the Office Park to accommodate a minimum of 50 cars and their drivers, in order to minimize traffic on roads in Princeton. In addition, as stated in Section III of this FEIR, Mitigation Measures TRANS-1 has been revised to require a traffic report for potentially impacted intersections to be submitted to the Community Development Director, at occupancy of every 60,000 sq. ft. of office space up until full project occupancy. The mitigation measure also requires the property owner to implement recommendations of the reports within one year such that intersection LOS for the above potentially impacted intersections would be maintained at a level of "C" or better.

Section IV.M (Transportation/Traffic) of the DEIR ~~also~~ concluded that the proposed project would result in significant but mitigatable impacts related to intersection LOS and capacity, and cumulative LOS. Given Alternative C includes the same building square footage and units associated with the project, the proposed shuttle service and revised Mitigation Measure TRANS-1, this alternative would also result in less than significant impacts related to traffic hazards, access and on-site circulation, emergency access, parking, transit service, and pedestrian and bicycle facilities. Likewise, Alternative C would also result in significant but mitigatable impacts related to intersection LOS and capacity, and cumulative LOS.

UTILITIES AND SERVICE SYSTEMS

Sewer

Alternative C would result in the generation of a similar amount sewage compared to the project because it involves the same amount of square footage and units as the project. Similar to the project, Alternative C would result in less than significant impacts related to wastewater treatment and capacity and sanitary district regulations. Like the project, Alternative C would also result in significant but mitigatable impacts related to wastewater collection capacity, wastewater recycling and disposal, water flow estimates, and creek crossing by sewage pipeline.

Water

Alternative C would result in the consumption of a similar amount of water compared to the project because it involves the same amount of square footage and units as the project. Similar to the project, Alternative C would result in less than significant impacts related to new or expanded water facilities, potable water demands, adequacy of on-site water well, and water treatment system.

Solid Waste

Alternative C would result in the generation of a similar amount of solid waste compared to the proposed project because it involves the same amount of square footage and units as the project. Impacts related to solid waste would be less than significant under Alternative C, which is similar to the project.

Energy

Alternative C would require a similar amount of energy compared to the proposed project because it involves the same amount of square footage and units as the project. Impacts related to energy would be less than significant under Alternative C, which is similar to the project.

RELATIONSHIP OF THE ALTERNATIVE TO THE PROJECT OBJECTIVES

Alternative C meets the project objectives.

Page VI-25 (Environmentally Superior Alternative)

In the DEIR, Alternative B was considered superior to the proposed project and other alternatives primarily due to fewer impacts to visual resources (due to the 2-story building heights) and avoidance of the cultural site on the southern (Wellness Center) site. As described in Section III of this FEIR, the Wellness Center proposal has been revised to avoid the cultural site. Therefore, with all things being equal on the Wellness Center parcel, Alternative B involves a 20% increase in building footprint compared to the proposed project and the construction of 4 large buildings. Modified Alternative C would involve a smaller increase of the project footprint (15%) and area of land disturbance compared to a 20% increase of the project footprint under Alternative B. These reductions in building footprint and land disturbance would result in reduced impacts to biological resources and hydrology than would occur under Alternative B. Regarding aesthetics, the 8 smaller buildings under Modified Alternative C would reduce the appearance of mass and allow for building clustering and variation in roof lines, bringing the project into closer conformance with the County Design Review (DR) Zoning District Regulations for the Coastside and making the scale and mass of the Office Park buildings more consistent with nearby buildings in Princeton.

While the total square footage of the Office Park under Modified Alternative C is 39,000 sq. ft. larger than Alternative B and would result in proportionally greater project operation traffic, consumption of water, utilities, and public services, the aesthetic benefits of the smaller scale buildings and biological/hydrological benefits of a smaller building footprint and area of disturbance would outweigh these impacts, which, like the project, would be mitigated to a less than significant level.

Based on the foregoing, this section is revised as follows:

In addition to the discussion and comparison of impacts of the proposed project and the alternatives, Section 15126.6 of the CEQA Guidelines requires that an "environmentally superior" alternative be selected and the reasons for such a selection disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of significant impacts. In this case, Alternative A (No Project) would result in the least amount of significant environmental impacts (see Table VI-1). However, Section 15126.6 of the CEQA Guidelines requires that an environmentally superior alternative be selected other than the "No Project Alternative." Based on the analysis above and Table VI-1 on the following pages, ~~Alternative B (Reduced Density/Height for Office Park and Reduced Size for Wellness Center Alternative)~~ Alternative C (Modified Office Park Site Plan Alternative 1) has been selected as the environmentally superior alternative to the proposed project. Alternative C~~B~~ is superior to the proposed project and other alternatives primarily due to fewer impacts to visual resources (due to the 2 and 3-story building heights), decreased lot coverage and increased wetlands restoration compared to Alternative B and avoidance of the cultural site on the southern (Wellness Center) site.

VII. PREPARERS OF THE EIR AND PERSONS CONSULTED

There are no Changes to this section. Please note that preparers and persons consulted in the preparation of the FEIR are listed in Section V of the FEIR.

VIII. BIBLIOGRAPHY

There are no changes to this section. Please note that references used in the preparation of the FEIR are listed in Section VI of the FEIR.

TECHNICAL APPENDICES *(Additions to Technical Appendices of the DEIR follow this section)*

Appendix E: Addition of 1) "90% Basis of Design - Riparian and Water/Wetlands Ecosystem Restoration," WSP, August 4, 2008 and 2) Army Corps of Engineers (ACOE) map is titled "Pillar Point Marsh, Half Moon Bay, CA., San Mateo County, Request for Sec. 404 Jurisdictional (File No. 20375S20)," dated June 20, 1994.[6]

Appendix J: Addition of *Big Wave Office Park and Wellness Center Traffic Report*, prepared by Hexagon Transportation Consultants, Inc. (Hexagon), June 24, 2009. The report was listed in the introduction of Section IV.M (Transportation/Traffic) of the DEIR and was available at the County's Planning and Building Department, but was inadvertently left out of Appendix J of the DEIR.

Appendix H: Addition of A) Hydrologic Calculations, B) The 2005 FEMA Letter of Map Amendment Determination Document, C) Concrete Grid Pavers-Fireline, Driveway and Intermittent Parking, and D) Permeable Pavement with Full Exfiltration to Soil Subgrade.

[6] *See Figure C of the Final EIR.*

Appendix I: Addition of "Noise Measurement" email from Dan Hooper to Jennie Anderson (CAJA), dated June 5, 2009.

Appendix K: Membrane Bioreactor Equipment, Enviroquip and other documents related to wastewater treatment plant design.

Addition to Appendix E of DEIR:

1) “90% Basis of Design - Riparian and Water/Wetlands Ecosystem Restoration,” WSP, August 4, 2008

Draft (90%) Basis of Design Report

Riparian & Waters/Wetlands Ecosystem Restoration for Big Wave Wellness Center and Office Park San Mateo County, California

August 4, 2008

Prepared for:

Big Wave LLC
1333 Jones Street
Suite 307
San Francisco, CA 94109

Prepared by:

Ecosystem Science & Natural Resources Management Services
160 Franklin Street, Suite 300
Oakland, CA 94607

DISCLAIMER

WSP Environment & Energy has prepared this basis of design report for use by Big Wave LLC. Waters of the U.S., including wetlands (waters/wetlands) boundaries presented in this report are described in a previous report by WSP (2008a). These waters/wetlands boundaries have been approved by the U.S. Army Corps of Engineers, San Francisco District (File No. 2008-001025; Regulatory Division, U.S. Army Corps of Engineers, San Francisco District, June 5, 2008). Wetland boundaries under California Coastal Commission jurisdiction have not received formal approval.

Lyndon C. Lee **August 4, 2008**

Lyndon C. Lee, Ph.D. Date
Principal Ecologist & Vice President
Ecosystem Science and Natural Resources Management Services
WSP Environment and Energy

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EXECUTIVE SUMMARY

The Big Wave Wellness Center and Office Park Project (hereafter, "Project") consists of the construction of a residential village and an adjacent commercial property/office park complex. The residential village is designed to provide affordable housing and independent living for a developmentally disabled community, and the office park is designed similarly to provide a state-of-the-art "green", LEED-certified working environment. The primary objective of the project is to construct innovative living and work environments that foster independent and meaningful living/work experiences for disabled young adults. The proposed Project also includes restoration of the waters of the U.S., including wetlands (*i.e.*, waters/wetlands) and California Coastal Commission (state) wetlands on the property that are currently used in agricultural production.

This basis of design report outlines a restoration plan for the riparian/wetland ecosystem that encompasses the federal and state waters/wetlands and their buffer that lie within the project area. This 90% restoration design describes a suite of activities that would increase waters/wetlands ecosystem functions, and to develop a native, diverse, and aesthetically pleasing landscape. Best management practices for stormwater treatment are designed to incorporate retention/detention microdepressions (rain gardens) and swales planted with native species.

The riparian/wetland ecosystem restoration plan includes five elements:

1. Earthwork, including mass and fine grading,
2. Installation of large wood,
3. Planting and irrigation,
4. Weed management, and
5. Monitoring and adaptive management.

The riparian/wetland ecosystem restoration design integrates the built environment with natural communities through utilization of native species for landscaping, locally adapted plant stock, and when possible, use of propagules obtained from the Project Site and adjacent landscape. Additionally, the Project design encourages community involvement by offering educational opportunities for village residents in the restoration process as well as via an informal foot path within the restored buffer. If implemented as designed, the riparian/wetland ecosystem will result an increase in the hydrologic, biogeochemical, native plant community, and faunal support/habitat functions of the currently farmed wetlands. A monitoring and adaptive management program will be implemented to ensure success of the restoration efforts.

I. INTRODUCTION

The Big Wave Wellness Center and Office Park Project (hereafter, "Project") consists of the construction of a residential village and an adjacent commercial property/office park complex. The residential village is designed to provide affordable housing and independent living for a developmentally disabled community, and the office park is designed similarly to provide a state-of-the-art "green", LEED-certified working environment. The primary objective of the project is to construct innovative living and work environments that foster independent and meaningful living/work experiences for disabled young adults.

The proposed Project also incorporates a restoration plan for the riparian/wetland ecosystem which for the purposes of this project includes (a) the waters of the U.S., including wetlands (hereafter, waters/wetlands), (b) California Coastal Commission (state) wetlands, and (c) a 100 foot wide buffer around these waters/wetlands. The majority of all three areas is currently are used in agricultural production. For the purposes of this Project, a "riparian/wetland ecosystem" is defined as upland, transitional, and waters/wetland habitats, all of which will be restored in a complex mosaic within a 100 ft buffer adjacent to existing federal and state waters/wetlands. Restoration of the buffer will provide significant benefits to waters/wetlands ecosystem functions, relative to existing conditions, particularly with respect to the native plant and animal communities. Of particular importance is the restoration of potential breeding habitat for the California red-legged frog (*Rana aurora draytonii*) and potential foraging habitat for the San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). The restoration design integrates the built environment with natural communities through utilization of native species for landscaping, locally adapted plant stock, and when possible, use of propagules obtained from the Project Site and adjacent landscape. Additionally, the Project design encourages community involvement by offering educational opportunities for village residents in the restoration process as well as via an informal foot path within the restored buffer.

A. Project Site

The Big Wave Project Site (hereafter, "Project Site") is located in unincorporated San Mateo County, adjacent to Princeton-by-the-Sea, California (Figure 1). The Project Site consists of two agricultural fields totaling 19.5 ac. These fields are separated by a small, county-owned, unnamed intermittent stream that is an extension of San Mateo County's Pillar Point Marsh. As such, it drains directly to the Pacific Ocean, entering the Pacific Ocean via Pillar Point Harbor immediately north of the mouth of Denniston Creek.

The Project Site is bordered to the northeast by the Half Moon Bay Municipal Airport (Figure 2) and to the south by Pillar Point Marsh, a nature reserve that is part of the County of San Mateo Fitzgerald Marine Reserve complex managed by the County's Parks and Recreation Division. A public trailer park is immediately north of the Project Site along Airport Road. Elevations at the Project Site range from 9.0 to 27.7 feet NGVD, although the agricultural fields are generally flat but slope gently to the south and west.

B. Existing Conditions at the Big Wave Project Site

1. Soils and Geomorphic Context

The Project Site is situated on the uplifted Half Moon Bay marine terrace formation within a partially filled coastal basin. The coastal basin consists of Pleistocene coarse-grained, alluvial fan and stream terrace deposits. Underlying sediments include poorly consolidated sand, gravel, and silt comprising the headward-most extent of old alluvial fans (Brabb and Pampeyan 1983). Montara Mountain, a northern spur of the Santa Cruz Mountain sequence of the Outer Coast Ranges, separates this low-lying coastal area from San Francisco Bay to the north and east.

Soils within the Project Site are mapped by the Natural Resources Conservation Service (NRCS, formerly U.S. Department of Agriculture Soil Conservation Service) as Denison clay loam on nearly level slopes (DcA) and Denison clay loam on nearly level slopes that are imperfectly drained (DdA) (NRCS 1961). These soils are derived from granitic alluvium, and have formed on low coastal terraces under the influence of herbaceous vegetation (grass). Denison clay loam soils occur on 0 to 2 percent slopes and the mapping unit has approximately 1 percent hydric inclusions, which typically are found in depressions across the mapping unit. Denison clay loam soils are generally highly fertile. Overall, Denison soils are classified as fine, smectitic (*i.e.*, clay derived from the alteration of the minute glass in volcanic ash, formerly known as bentonite), isomesic (*i.e.*, summer and winter temperatures differ by less than 6˚C at 50 cm depth) pachic argixerolls (see Soil Survey Staff 2006).

2. Climate

The Project Site has a mild Mediterranean type climate maintained by persistent sea breezes. Temperatures rarely exceed 90°F and seldom drop below 32°F. Average daily temperatures (by month) range from 51°F to 59°F (NRCS 2007). Cloud coverage and fog are common during the evening and early morning hours, but typically dissipate during mid-day. Total average annual precipitation is 28 inches (NRCS 2007).

3. Hydrology

Hydrologic inputs to the project site are dominated by precipitation and surface runoff. The majority of surface runoff comes to the Project Site via the Half Moon Bay Airport storm water runoff collection system. Within the airport property, runoff is consolidated in a series of channels, culverts, and pipes leading to a pair of concrete culverts (44” diameter) that run southwest under Airport Street. The 44” culverts form the headward-most extent of a stream reach of an unnamed intermittent tributary that bisects the Project Site. This tributary passes through two culverts under West Point Avenue and connects with the tidally influenced Pillar Point Marsh, eventually flowing into Pillar Point Harbor (WSP 2008a).

4. Plant Communities

The Project Site, consisting of two more or less adjacent agricultural fields, currently is under active cultivation. The site is annually plowed, disked, and planted in one or more rotations; therefore, little to no adventive (uncultivated) vegetation persists or has the opportunity to

colonize across the great majority of the Project Site. In those areas where agricultural clearing had not occurred recently (*e.g.*, along Airport Street verge and in very small, scattered patches within agricultural fields), non-native annual grasses and forbs occur. Dominant species along the main verge include wild oats (*Avena* spp.), bristly oxtongue (*Picris echioides*), and common vetch (*Vicia sativa*).

Along the unnamed intermittent tributary that bisects the property and the southern perimeter of the property adjacent to Pillar Point Marsh, riparian (palustrine scrub shrub) and seasonal freshwater wetland plant communities persist (palustrine persistent and non-persistent emergent) (Cowardin *et al.* 1979). Dominant species within the unnamed drainage include willows (*Salix lasiolepis, S. scouleriana, S. sitchensis*), California blackberry (*Rubus ursinus*), and poison hemlock (*Conium maculatum*). Dominant species along the southern edge of the property included slough sedge (*Carex obnupta*), soft rush (*Juncus effusus*), silverweed (*Potentilla anserina* var. *pacifica*), field mint (*Mentha arvensis*), arroyo willow (*Salix lasiolepis*), and California blackberry. Overall, the vegetation on the proposed project site has been significantly altered and reflects a long history of regular disturbance and agricultural cultivation.

5. Protected Species

No rare plants of conservation concern have been observed on the project site (WSP 2008b). Four rare plant species have been documented by the California Natural Diversity Database (CNDDB) within two miles of the Project Site, but they are unlikely to occur on the Project Site due to lack of suitable habitat.

No rare, threatened or endangered animal species have been observed on the Project Site (WSP 2008b). The WSP field team observed 29 wildlife species on the property during a field survey in early Spring 2008. One species on the watch list of the California Department of Fish and Game, the sharp-shinned hawk, was observed flying above the property. Two special status animal species, *Rana aurora draytonii* (California red legged frog) and *Geothlypis trichas sinuosa* (saltmarsh common yellowthroat) have been recorded in the past on adjacent property (CNDDB 2008). The California red legged frog, including one adult and one sub-adult, were observed in a wetland near the Project Site near West Point Road on May 7, 1999 (CNDDB 2008). The saltmarsh common yellowthroat has been observed near the site in the past; specifically, observations of individuals or breeding pairs were recorded in 1985, 1988, 1989, and 1990, but have not been document since then (CNDDB 2008). During the 2008 field effort, the WSP team observed one common yellowthroat perched in willows in the wetlands adjacent to and to the southwest of the Project Site. These protected species are not expected to occur on the Project Site as no suitable breeding or foraging habitat currently exists.

6. Extent of Jurisdictional Waters/Wetlands and their Buffers

Approximately 0.45 acres of wetlands of "other waters" (Type 3 waters of the U.S.), 0.74 acres (32,180 ft^2) of California Coastal Commission waters/wetlands, and 4.26 acres of buffer are delineated at the Big Wave Project Site (WSP 2008a, Figure 3). The great majority of these waters/wetlands are found along the southern margin of the property. The proposed development will avoid all direct impacts to waters/wetlands and the 100 foot buffer set back.

II. OBJECTIVES

WSP Environment & Energy (WSP) was retained by Big Wave LLC to assist in the restoration of the native coastal ecosystems at the Project Site. The purpose of the restoration effort is to increase the functioning of the native coastal ecosystems at the Project Site. Specifically, in this report, WSP was asked to assist with the following tasks:

1. Prepare a restoration plan for riparian waters/wetland ecosystem within the buffer area of the Project Site.
2. Design a natural landscaping plan of native species for the residential and commercial areas.
3. Assist in the design of natural storm water management/rain garden system using native plant species genetically adapted to the central coast of California.

Sections III, IV and V of this report describe designs developed for the riparian buffer restoration, native landscaping, and natural storm water management, respectively.

III. DRAFT (90%) RIVERINE WETLAND ECOSYSTEM DESIGN

A. Guiding Principles

WSP used the following set of principles to guide design of the riverine/riparian waters/wetland ecosystem restoration:

1. Give due diligence to federal, state and local regulatory requirements.
2. Target no net loss of waters/wetlands area and/or ecosystem functioning.
3. Base the restoration design on attainable regional reference conditions.
4. Aim to restore the native hydrological, biogeochemical, plant community, and faunal support/habitat functioning.
5. Target restoration of riverine ecosystem functions (*e.g.*, through maintaining hydrological connectivity within the landscape and restoring microtopography).
6. Integrate the form and function of the natural and the constructed landscapes.

B. U.S. Army Corps and EPA Guidance on Wetlands Compensatory Mitigation

In April 2008, the U.S. Army Corps of Engineers along with the U.S. Environmental Protection Agency issued new standards to improve wetland restoration and protection policies (Federal Register 2008). The new "wetlands compensatory mitigation standards" were offered to promote the use of best available science, promote innovative approaches to the "no net loss of area and/or function" national policy, and to focus on the results of restoration and protection.

Relevant to the Big Wave Wellness Center and Office Park Project, these new Corps/EPA mitigation standards reaffirm the mitigation sequence of avoid, minimize, and mitigate (compensate). The Big Wave Project is avoiding all impacts to existing waters/wetlands (including both waters of the U.S. and Coastal Commission wetlands) and therefore is in line with the new guidance on mitigation sequencing. As described in this basis of design, the proposed restoration of riparian areas adjacent to waters/wetlands will likely result in expansion of at minimum 5.3 acres of state wetlands.

C. General Description and Design Rationale

The riparian waters/wetlands ecosystem buffer design includes ten plant community types that support approximately 75 native California taxa (Figures 4-10). The community types are based upon the U.S. Fish & Wildlife Service's hierachical classification system (Cowardin *et al*. 1979) of five wetland systems – marine, estuarine, riverine, lacustrine, and palustrine. Only wetlands within the palustrine system are appropriate to the Project Site. As such, three palustrine forest communities, two palustrine scrub-shrub communities, three palustrine (persistent) emergent communities are proposed. Additionally, an upland community that supports native coastal scrub species and similarly a plan for the storm water swales also is included.

A total of 54 polygons at the Wellness Center and Office Park (inclusive) will be restored, representing a total 5.3 acres of riparian and waters/wetlands within the buffer and across the built landscape. Specifically, a total of 1.89 acres of palustrine forest, 2.47 acres of palustrine scrub shrub, 0.51 acres of palustrine emergent wetlands will be restored, in addition to 0.26 acres of upland coastal scrub and 0.18 acres of stormwater wetland swales (Figures 4-10).

In the design process of the riparian buffer along the adjacent waters/wetlands of Wellness Center and Office Park, WSP focused on achieving the highest level of ecosystem functioning possible. Design elements relative to ecosystem function were developed based on site history and landscape context and will be monitored over a minimum of ten years post restoration. Importantly, an increased level of function has to be achieved while also achieving a natural, unbroken, visually attractive transition between the restored ecosystem and the residential/commercial landscape. To achieve this target, WSP relied upon:

1. A reference database and draft hydrogeomorphic guidebook for 3rd and 4th order riverine waters/wetlands of the central California coast (NWSTC 1996) developed to assist in the design, permitting and monitoring of riverine restorations within this reference domain (biogeographic province),
2. Relevant literature, reports, flora documentation, and
3. Cumulative 60+ years of professional experience of the lead WSP scientists working in waters/wetlands ecosystems along the central coast of California.

This 90% restoration design is based upon a suite of activities that would increase waters/wetlands ecosystem functions and develop a native, diverse, and aesthetically pleasing landscape. Elements of the restoration design are focused around five phases of work, including earthwork, (mass and fine grading), installation of large wood, planting and irrigation, weed management, and monitoring and adaptive management.

Our rationale for implementation of each technique is described in the following text.

1. Earthwork

Natural transitions within the landscape will need to be restored as a result of historic land uses and the integration of wild and urban environments. Mass grading can restore landscape hydrologic connectivity creating smooth transitions within and between wetland and upland habitat. In addition, mass grading is extremely effective at removing weeds through eliminating standing biomass and elimination of a viable seed bank in the upper soil horizon(s). Earthwork also decreases competition from well-established weeds and, with standard grading techniques such as ripping and/or disking, helps loft soil, blend top and sub-soil horizons, and prepare a successful planting environment.

Fine grading involves the use of directed time to grade microtopographic features within the riverine and riparian environments. Finish grading also involves the placement of large wood structures, and will thus provide an essential element of an ecosystem (detritus). These wood structures will mimic dead and decomposing features of a woody riparian ecosystem, including

snags (standing dead), decadent/decaying logs, and log jam features of floodplains and fluvial systems, as described in the following paragraph.

2. Installation of large wood and log structures

Prior to agriculture, grazing, clearing, industrial uses, and intense water management in California, large wood was a part of natural ecosystems. Log structures can be placed above and/or below ground. Large wood provides numerous ecosystem functions, for example log structures create roughness (*i.e.,* increase Manning's *n*) that slows water flow and spreads it out to promote maximum contact of water with the floodplain surface. Log structures can be strategically placed in order to deflect flood waters away from civil structures including roadways, bridges, *etc.* Large wood creates hydraulic complexity within a reach through dissipation, focusing, and/or adding complexity to the riverine ecosystem and thereby provide habitat for aquatic invertebrates and vertebrates, including fish. Placement of large wood and log structures creates microtopographic variation with abrupt gradients in site water balance which allows for increased plant diversity and variety of habitat microsites.

3. Planting and Irrigation

Planting will be conducted to maintain fidelity to native plant community structure, function, and composition for the Project Site. A native plant nursery will be established on site for the project to provide nursery stock, to hold for planting, and to generate replacement stock should replacement planting become necessary after the project is completed. Collection of seed will be conducted as close to the project site as possible to ensure reestablishment of a suite of locally adapted native plants. An irrigation system will be installed to increase likelihood for planting success. Restoring native plants also will increase the detrital pool (in this case, primarily quickly decomposing carbon sources) that has been removed due to intensive farming. Native plant community restoration improves hydrologic and biogeochemical functioning on the site and provides habitat for native fauna by offering hiding, resting, escape, breeding, and foraging habitats. Establishment of native plants will lead to relative exclusion of non-native and invasive weeds and will provide vertical and horizontal structure within the landscape.

4. Weed Management Strategy

Several aggressive, non-native plant species are present at or near the Project Site, including Himalayan blackberry (*Rubus discolor*) and German ivy (*Delairea odorata*). Invasive weed species not only degrade the plant community functions, but also threaten the success of a restoration project. Therefore, an integrated weed/pest management strategy should be developed and implemented in tandem with the restoration project. The weed management strategy begins with control of existing weeds adjacent to the restoration area through hand pulling, approved localized chemical application, and/or mowing. Installing native plants species with rapid growth rates and/or at high densities will help to quickly develop a canopy which excludes weed recruitment. Continued maintenance including hand weeding and replanting of plants which suffer mortality should be conducted following restoration.

5. Maintenance, Monitoring and Adaptive Management

To ensure that restoration is a success and that appropriate adaptive management/contingency measures are used, the Project Site will be monitored following restoration for a minimum of 5 years. Project targets and standards articulated in the monitoring plan will be established at the beginning of the restoration project and based on the assessment of the path that will achieve stated goals. The monitoring design will include methods to quantify and document each project target and standard and will identify criteria for success. Monitoring protocols will include some combination of photo points, topographic surveys, soil profiles, invertebrate surveys, and/or assessment of vegetation cover and composition. In case project standards and/or success criteria are not met, an adaptive management strategy with contingency measures will be included as part of the monitoring plan. In the event of failure to achieve a project standard, recommended contingency measure(s) will be outlined (*e.g.,* weeding, grading, planting) and implemented as soon as possible.

D. Construction Sequencing

The various tasks associated with the Project Site restoration plan are described in general terms in the following text, which will be used to guide the development of construction plans and specifications.

1. Earthwork (mass and finish grading)

a) Grade to create a smooth transition to the surrounding landscape
b) Grade surrounding landscape to increase rugosity in the surrounding landscape. Rugosity is a measure of small-scale variations and complexity or surface roughness. Increased rugosity offers a relatively more diverse array of sites for planting.
c) Using directed time, construct and link microtopographic depressions and small scale swales, rain gardens, and storm water features.

2. Log Structures

Large wood on and within the active channel and on the adjacent floodplain and associated stream terraces is an integral structural variable of fluvial systems, and an equally important link for plant and animal support ecosystem functions. As such, large wood structures will be constructed across the wetland/riparian buffer.

a) Using directed time, install large wood structures as articulated in the planting plan and other construction documents. These structures shall consist of single logs or piles of log on and beneath final grade (Figure 11).

3. Planting and Irrigation

a) Through mass grading remove all existing weeds and where possible, seed source in the upper 6 inches of soil.
b) Lay out (*i.e.,* stake) planting plan as designed (see Figure 4, 5, 8-10)

c) Install native nursery stock according to planting plan using a suite of plant community types suited to microsite conditions and with fidelity to reference system conditions (Figure 6).
d) Mulch entire planted and seeded areas with minimum 4" lift of sterile (weed-free) straw
e) Install temporary irrigation system. Following grading activities, install a temporary irrigation system to provide irrigation water to all planted areas across the wetland and riparian buffer. A temporary irrigation plan will be designed prior to project implementation.

4. Weed Control

After initial establishment of restored riparian/wetland ecosystem area and functioning, management of weeds/invasive species will become a high priority. Implementation of weed management must address (i) re-emergence of weeds from onsite seed banks, (ii) establishment of existing populations of weeds that were not removed in the initial clearing effort, and (iii) colonization of restored area from offsite exotic seeds sources. Weed control efforts should be adapted with an integrated program which includes mowing, hand weeding, and re-planting or interplanting additional plants as necessary. Weed control will be required as part of the monitoring, maintenance and adaptive management activities.

5. Monitoring Maintenance and Adaptive Management

a) Assume a ten year monitoring interval with monitoring reports completed at Year 0 (baseline), 1, 2, 5, and 10.
b) Conduct two site visits per monitoring year, wet and dry season. During each visit, characterize the site through the collection of site data referencing project standards including hydrologic, biogeochemical, plant community and faunal support/habitat functions.
c) Prepare annual monitoring report due by December 15 each monitoring year. Based on observations, recommend any necessary maintenance and/or adaptive management measures.
d) Implement maintenance and adaptive management measures, including weeding, as necessary.

E. Sediment and Erosion Control

Restoration construction should be initiated and completed during the dry season (May to November). All construction activities must adhere to the project-specific Storm Water Pollution and Prevention Plan (SWPPP) and associated Temporary Erosion and Sediment Control (TESC) plan, both of which must be prepared and submitted by the Big Wave LLC or its consultants to the regulatory community prior to project implementation.

The first step will be to install sediment and erosion control measures according to the SWPPP and TESC. Upon completion of earthwork and log structure installation (*e.g.*, creating

microdepressions, creating windthrow mounds, installing log jams, *etc*.), temporary irrigation must be installed to ensure successful post-construction planting. In addition, Big Wave Group or its consultants may be required to prepare and submit a water quality monitoring plan to regulatory agencies, as part of the monitoring agreement with regulatory agencies.

F. Proposed Design Success Criteria

Specific project standards and associated success criteria (*i.e.*, field indicators/measurements) have been developed for this riparian/wetland ecosystem restoration project. The proposed restoration design places emphasis on the following four project targets.

Project Target 1: ***Increase waters/wetlands habitat patch size for native wetland and riparian animal species typical of the central California coast.***

Project Standard: Success Criteria

1. Increase Patch Size: One hundred percent coverage by native plant communities in the 100 foot buffer.

Project Target 2: ***Establish and maintain diverse native plant communities, with nursery stock genetically adapted to the restored wetland and riparian ecosystem restoration project site.***

Project Standard: Success Criteria

1. Percent cover of native tree species in riparian forest communities: Greater than or equal to 95%.
2. Percent cover of native shrub species in riparian forest and scrub-shrub communities: Greater than or equal to 40% and less than or equal to 75%.
3. Percent cover of native shrub species in riparian scrub-shrub communities: Greater than or equal to 95%.
4. Percent cover of native forbs, graminoids, ferns, and fern allies in palustrine persistent and non-persistent emergent community types: Greater than or equal to 80%.
5. Percent cover of native forbs, graminoids, ferns, and fern allies in forest and scrub shrub communities: Greater than or equal to 20% and less than or equal to 75%.
6. Percent of native species cover in each stratum: Greater than or equal to 85%.
7. Vigor of planted stock: Greater than or equal to 80% survival.

Project Target 3: ***Increase microtopographic complexity (i.e., microdepressions, windthrow mounds) within the restored riparian and waters/wetlands ecosystem restoration project site***

Project Standard: Success Criteria

1. Structural features: Large wood (windthrow mounds) remain structurally stable.
2. Microtopographic roughness: Constructed microtopotraphic features remain intact.

Project Target 4: ***Increase the faunal support/habitat function for native species within the restored riparian and waters/wetlands ecosystem restoration project site***

Project Standard: Success Criteria

1. *Vegetative strata*: Forest communities- three or more strata (*i.e*., trees, shrubs, herbs, with sapling/seedling and/or vines as additional stratum); Scrub-shrub communities - greater than or equal to two strata (*i.e*., shrubs, herbs, with sapling/seedling and/or vines as additional stratum)
2. *Faunal diversity*: Restoration site continues to attract a diversity of native wildlife
3. *Canopy cover*: Greater than 80% cover by two or three strata in forest and scrub-shrub communities.

G. Expected Changes in Ecosystem Functions Following Restoration

The proposed riparian/wetland ecosystem restoration plan is expected to result in the increase in ecosystem functioning as considered by four types of wetland functions: (1) hydrologic, (2) biogeochemical, (3) plant community, and (4) faunal support/habitat functions. Comparisons between current (existing) conditions on the site and wetland conditions expected five years after restoration were assessed using best professional judgment. It should be noted that the riparian restoration will result in an increase of approximately 5.3 acres of wetlands under jurisdiction of the California Coastal Commission, but is not expected to add any increase in federal jurisdiction.

Factors affecting the ability of the wetlands at the Project Site to perform ecosystem functions include, but are not limited to (1) degradation from historical land use, (2) intensity of cropping practices, (3) historic modifications to hydrologic features of the site, (4) non-native species, and (5) urbanization in surrounding landscape.

1. Hydrologic Functions

Energy Dissipation. Energy dissipation is defined as *the transformation and/or reduction of the kinetic energy of water as a function of the roughness of the landscape and channel morphology, and vegetation.*

Existing conditions at the Project Site do not allow for significant energy dissipation because the site is cleared and farmed. However, installation of large wood, establishment of complex microtopography, and a diverse plant community including trees will promote an increase in this function.

Surface & Subsurface Storage of Water. Surface & Subsurface Storage of Water is defined as *the presence of soil and/or geologic materials within the creek ecosystem, including the hyporheic zone, that have physical characteristics suitable for detention, retention, and transmission of water.*

The Project Site currently is leveled and degraded by agricultural activities. However, this wetland function is recoverable with the proposed restoration through establishment of sinuous storm water swales hydrologically linked to microtopographic depressions, installation of large wood above and below ground, and development of a native plant community with complex vertical structure.

Landscape Hydrologic Connections. Landscape Hydrologic Connections is defined as *the maintenance of the natural hydraulic connectivity among source areas of surface and subsurface flow to riverine waters/wetlands and other downgradient waters/wetlands.*

This hydrologic function at the Project Site is degraded due to ditching associated with road construction both upstream and downstream and the agricultural activities on the property. The down gradient connection is culverted under and interrupted by West Point Avenue. This function is only modestly recoverable with the proposed wetland and riparian ecosystem restoration.

2. Biogeochemical Functions

Cycling of Elements & Compounds. Cycling of Elements & Compounds is defined as *the short- and long-term transformation of elements and compounds through abiotic and biotic processes that convert chemical species (e.g., nutrients and metals) from one form, or valence, to another.*

The Project Site is not functioning at a high level in its existing conditions because the original slope wetlands and associated hyporheic zone have been filled, drained, and degraded by agricultural activities. However, this function is recoverable with the proposed restoration due to increased microtopographic variation, installation of large wood, and establishment of a diverse native plant community.

Removal of Imported Elements & Compounds. Removal of Imported Elements & Compounds is defined as *the removal of imported nutrients, contaminants, and other elements and compounds in surface and groundwater.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled and degraded as a result of agriculture and road building activities. This function is recoverable with the proposed restoration.

Retention and Detention of Particulates. Retention and Detention of Particulates is defined as *the deposition and retention of inorganic and organic particulates (>0.45μm) from the water column, primarily through physical processes.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration.

Organic Matter Export. Organic Matter Export is defined as *the export of dissolved and particulate organic carbon from a wetland.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled and degraded as a result of agriculture and road building activities. This function is recoverable with the proposed restoration.

3. Plant Functions

Characteristic Native Plant Communities. Characteristic Plant Communities is defined as *the physical characteristics and ecological processes that maintain the indigenous living plant biomass*.

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration. The Project Site should be expected to achieve a reference condition after a period of time that exceeds the expected five-year monitoring program.

Characteristic Detrital Biomass. Characteristic Detrital Biomass is defined as *the process of production, accumulation, and dispersal of dead plant biomass of all sizes.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration and will likely achieve reference standard functioning after ten years or more, i.e., after the conclusion of the anticipated five-year monitoring program.

4. Faunal Support Habitat Functions

Spatial Structure of Habitat. Spatial Structure of Habitat is defined as *the capacity of waters/ wetlands to support animal populations and guilds through the heterogeneity of structure of vegetative communities.*

The Project Site currently is functioning at a low level because the original riparian zone has been leveled, degraded, and invaded by a large number of non-native species as a result of agriculture and road building activities. This function is recoverable with the proposed restoration and will likely achieve reference standard functioning after ten years or more, *i.e.*, after the conclusion of the anticipated five-year monitoring program.

Habitat Interspersion & Connectivity. Habitat Interspersion & Connectivity is defined as *the capacity of waters/wetlands to permit aquatic, semi-aquatic, and terrestrial organisms to enter and leave a riverine ecosystem via large, contiguous plant communities to meet life history requirements.*

The Project Site currently is functioning at a low level because the original characteristic physical complexity of an associated riparian community is not present nor is it juxtaposed in a mosaic of coastal scrub, sage scrub, perennial grasslands, vernal swales, and depressions characteristic of the central Coast Ranges. This function is recoverable with the proposed restoration, and possible reference standard functioning after ten years or more, largely through the restoration of the riverine vegetative structure and adjacent plant communities.

Distribution & Abundance of Vertebrates. Distribution & Abundance of Vertebrates is defined as *the capacity of waters/wetlands to maintain characteristic density and spatial distribution of vertebrates (aquatic, semi-aquatic and terrestrial).*

The Project Site currently is functioning at a low level because the original characteristic physical complexity of an associated riparian community is not present nor is it juxtaposed in a mosaic of perennial grasslands, vernal swales and depressions characteristic of the central Coast Ranges. This function is recoverable with the proposed restoration, and possible reference standard functioning after ten years or more, largely through the restoration of the wetland and riparian vegetative structure and adjacent plant communities.

Distribution & Abundance of Invertebrates. Distribution & Abundance of Invertebrates is defined as *the capacity of waters/ wetlands to maintain the density and spatial distribution of invertebrates (aquatic, semi-aquatic and terrestrial).*

The Project Site currently is functioning at a low level because the original characteristic physical complexity of an associated riparian community is not present nor is it juxtaposed in a mosaic of coastal scrub, sage scrub, perennial grasslands, vernal swales and depressions characteristic of the central Coast Ranges. This function is recoverable with the proposed restoration, and possible reference standard functioning after ten years or more, largely through the restoration of the wetland and riparian vegetative structure and adjacent plant communities.

VII. BEST MANAGEMENT PRACTICES FOR STORMWATER TREATMENT

San Mateo County (County) has established best management procedures for the treatment of storm water because federal and state laws require municipalities to reduce pollution to waters of the United States by storm waters. According to the San Mateo County's website (http://www.flowstobay.org/p2business/bestmanagementpractices.html), cities within the County are governed under the *San Mateo Countywide Water Pollution Prevent Program* as part of the City/County Associate of Governments of San Mateo County. As such, the County has published procedures, guidelines, *etc.* to reduce and prevent pollution to the adjacent waters. The storm water treatment system proposed for the Big Wave Project incorporates the County's overall approach and practices for storm water management.

Design features for storm water pollution prevention by the Project include separate storm water retention and detention ponds for relatively dirty storm water (*e.g.*, water from parking lots) and relatively clean water (*e.g.*, roof water runoff). Separate water delivery systems for clean and dirty storm water will be constructed at each of the developments (*i.e.*, office park and wellness center). Comparatively dirty storm water will be filtered through a series of grit removal, oil/water separators, and then directed to a retention/detention "rain gardens" (Figures 8 and 9) within the riparian restoration zone. Stormwater will flow through a swale prior to overland flow into the existing wetlands. Similarly, clean storm water will be directed to a separate series of retention/detention microdepressions (rain gardens) via a similar storm water swales (Figure 10). A portion of the clean storm water will be directed to an infiltration basin (one at each development) to recharge ground water. In short, the bioswale/microdepression system will serve to improve water quality in the adjacent existing waters/wetlands ecosystems by treating storm water in a series of treatments as described above.

VIII. CONCLUSIONS

As presented in this *90% Design Report*, the Big Wave Wellness Center and Office Park Project consists of the construction of a residential village and an adjacent commercial property/office park complex. The proposed wetland and riparian ecosystem restoration project also includes restoration of the waters of the U.S., including wetlands, California Coastal Commission wetlands that currently exist as agricultural land. Specifically the Project will restore a complex mosaic within a 100 ft buffer adjacent to existing federal and state waters/wetlands to provide significant benefits to waters/wetlands ecosystem functions, particularly the native plant and animal communities relative to existing conditions. A total of ten plant community types, primarily native forest, scrub shrub, and perennial sedge/rush meadows, composed over approximately 75 native plant species arrayed in 54 planting polygons represent the riparian/wetland ecosystem restoration design. Of particular importance is the restoration of potential breeding habitat for the California red-legged frog, and potential foraging habitat for the San Francisco garter snake, two native vertebrates not known to utilize the Project Site, but which may be able to establish viable populations as a result of the restoration effort.

If implemented as designed, the riparian/wetland ecosystem will result an increase in the hydrologic, biogeochemical, native plant community, and faunal support/habitat functions of the currently farmed wetlands. Equally importantly, the project represents a state-of-the art integration of the natural and built environments through the restoration of the immediate landscape immediately surrounding the Office Park and Wellness Center, and through the utilization of native species for landscaping, locally adapted plant stock, and propagules obtained from the Project Site and adjacent landscape.

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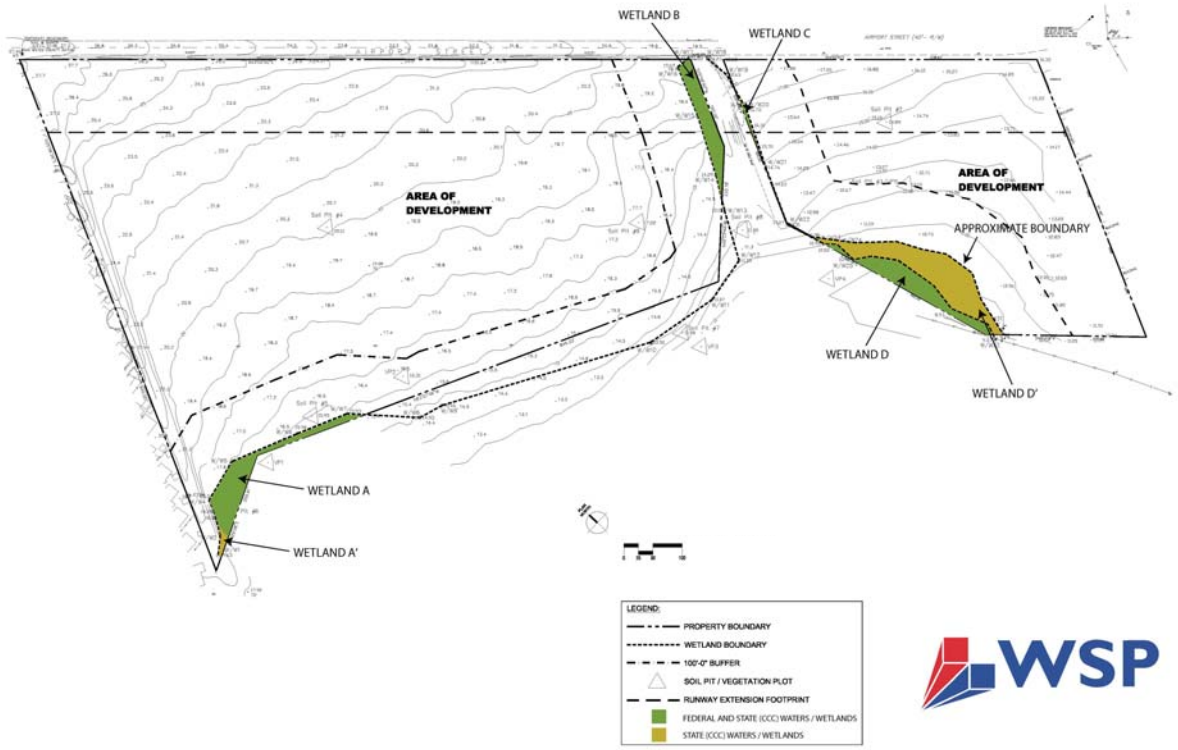
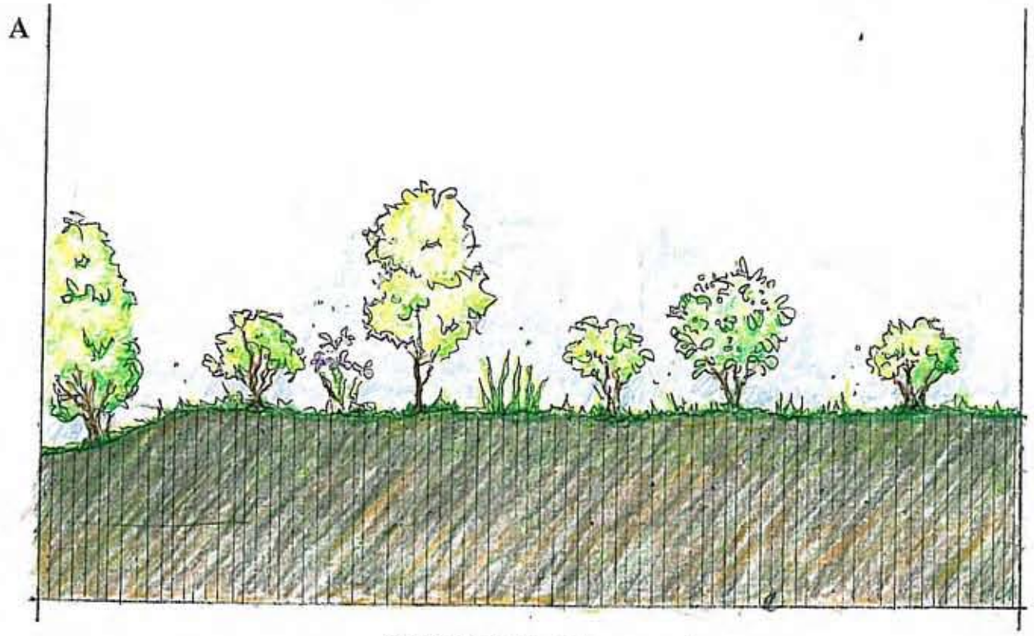
X. FIGURES

Figure 1. The Project Site is located along the central coast of California south of San Francisco and east of the city of Santa Cruz (Map Reference: http://cwp.resources.ca.gov)

Figure 2. Approximate location of the Big Wave Project Site in unincorporated San Mateo County, California.

Figure 3. Geographic extent of waters of the U.S., including wetlands consistent with definitions provided at 33 CFR 328.3(a)(1-8), and of wetlands as defined by the California Coastal Act (Public Resources Code Division 20 California Coastal Act Section 30121).





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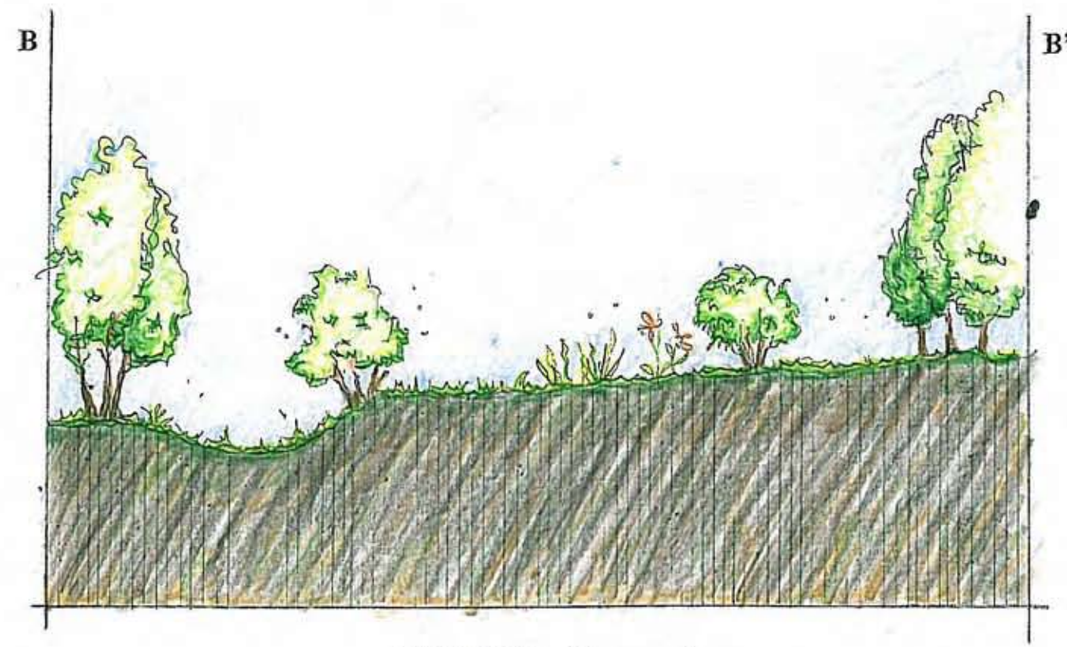

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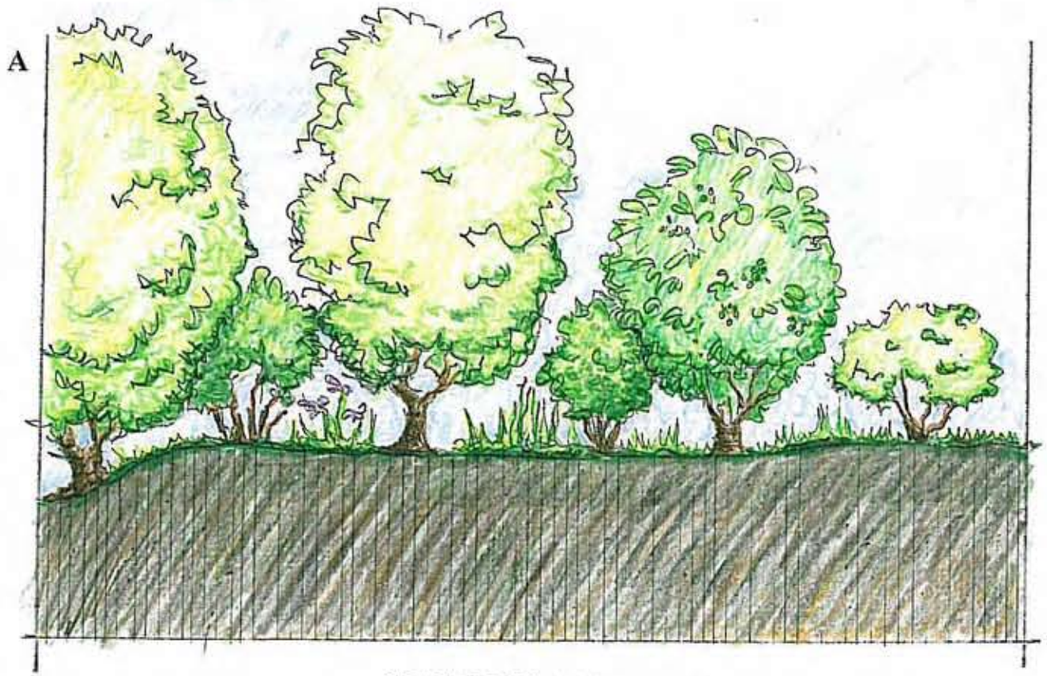

SECTION (10 years)
NTS

SECTION (10 years)
NTS

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PROJECT TITLE:
Big Wave

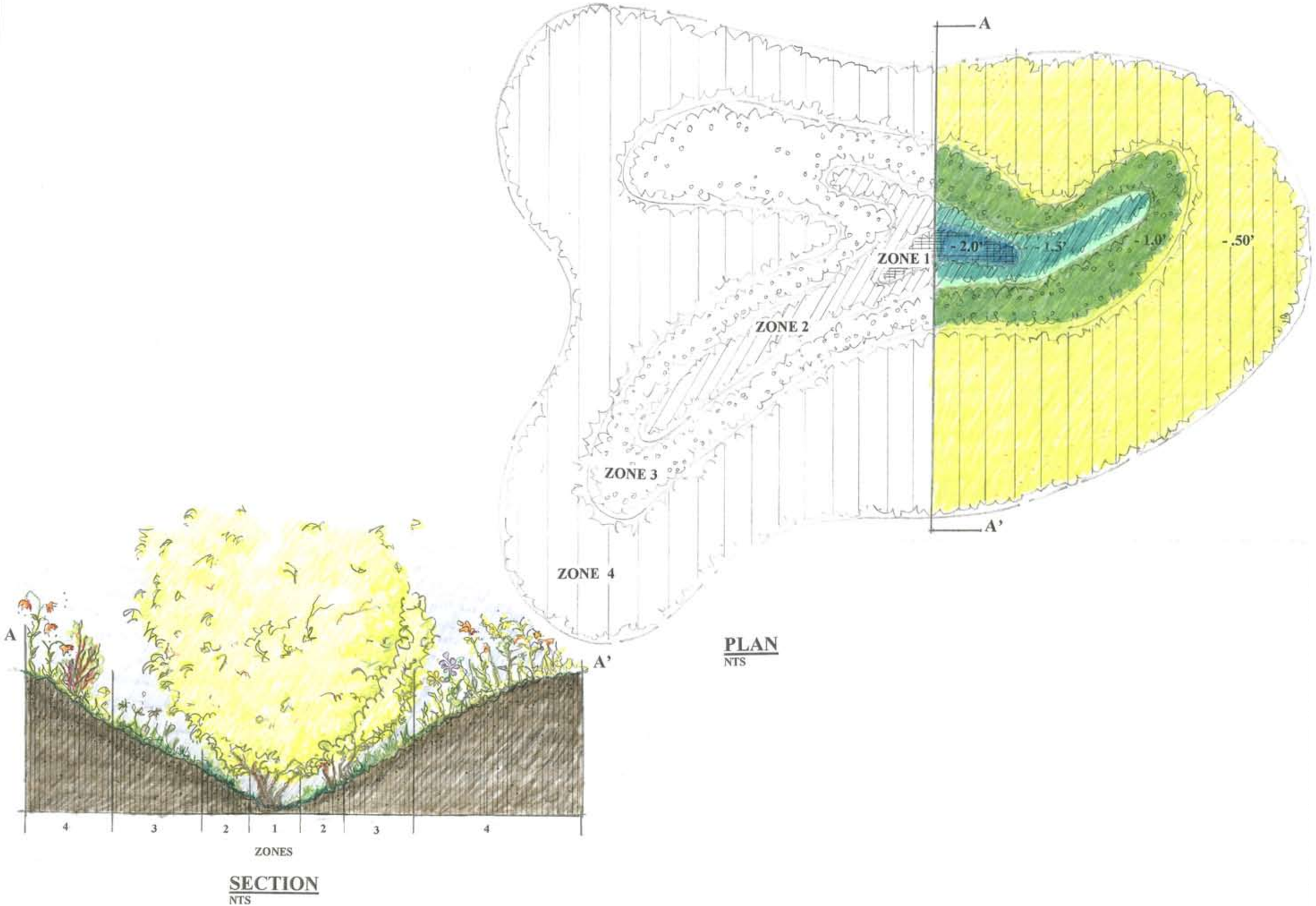
SHEET TITLE:
Buffer Restoration:
Wellness Center Section

REVISIONS:

Date:
Designer:
Drawn By: FMD
Checked:
Scale:

SHEET:

FIGURE 7



PLAN
NTS

SECTION
NTS

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PROJECT TITLE:
Big Wave Office Park

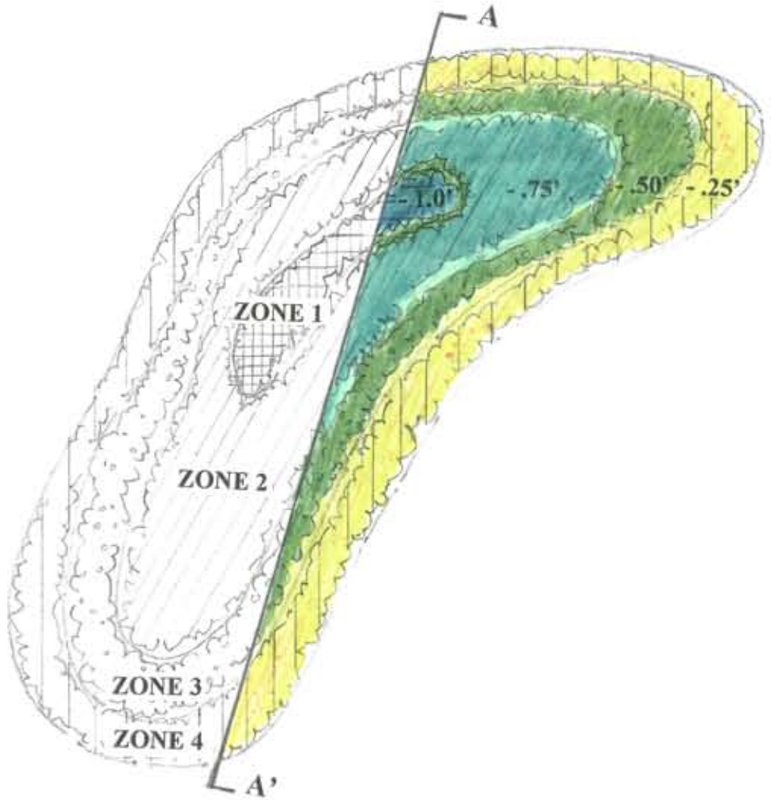
SHEET TITLE:
Stormwater R/D Basin- Large

REVISIONS:
3 / 18 / 08

Date: 3 / 14 / 08
Designer:
Drawn By: FMD
Checked:

SHEET:

FIGURE 8



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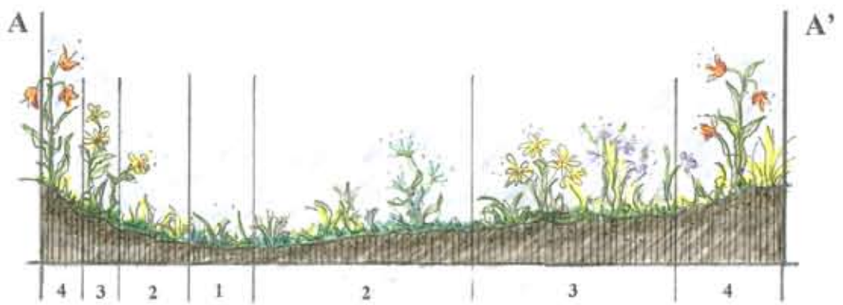

SECTION
NTS

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PROJECT TITLE:
Big Wave Office Park

SHEET TITLE:
Stormwater R/D Basin- Small

REVISIONS: 3 / 18 / 08

Date: 3 / 14 / 08
Designer:
Drawn By: FMD
Checked:

SHEET:
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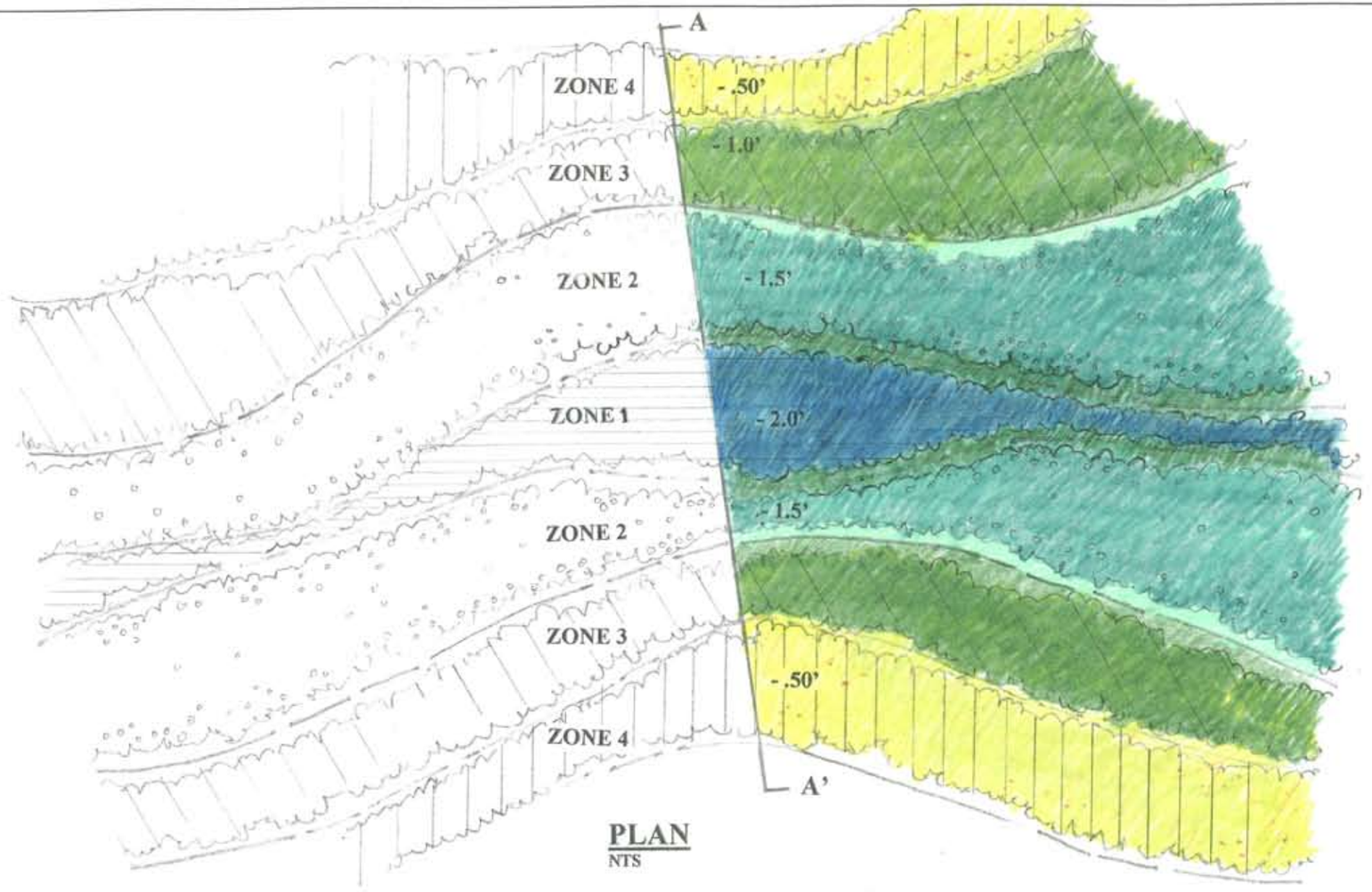

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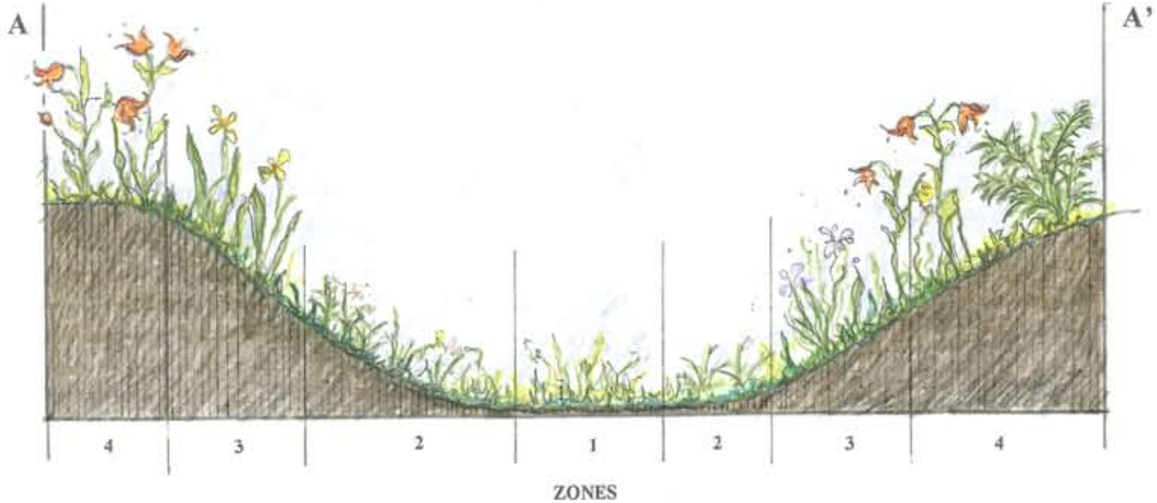

SECTION
NTS

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PROJECT TITLE:
Big Wave Office Park

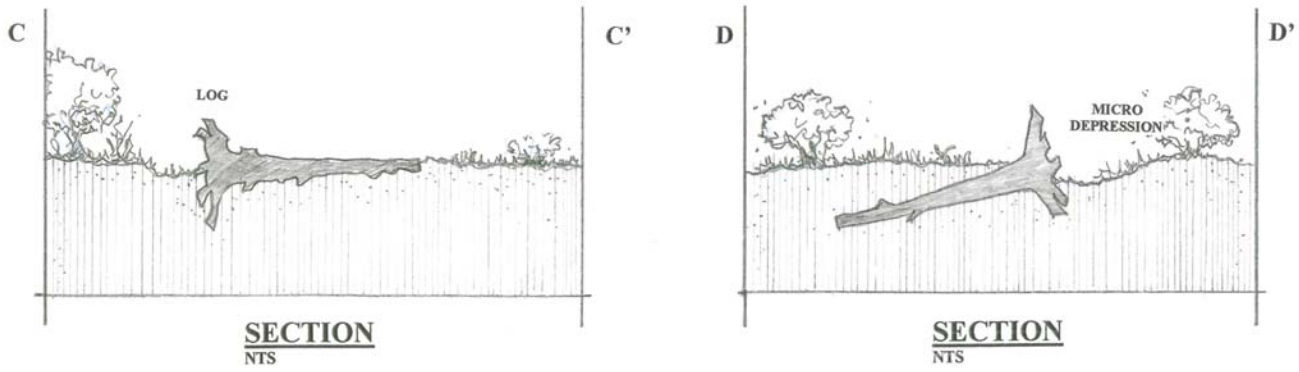
SHEET TITLE:
Stormwater Swales

REVISIONS:
3 / 18 / 08

Date:
Designer:
Drawn By: FMD
Checked:

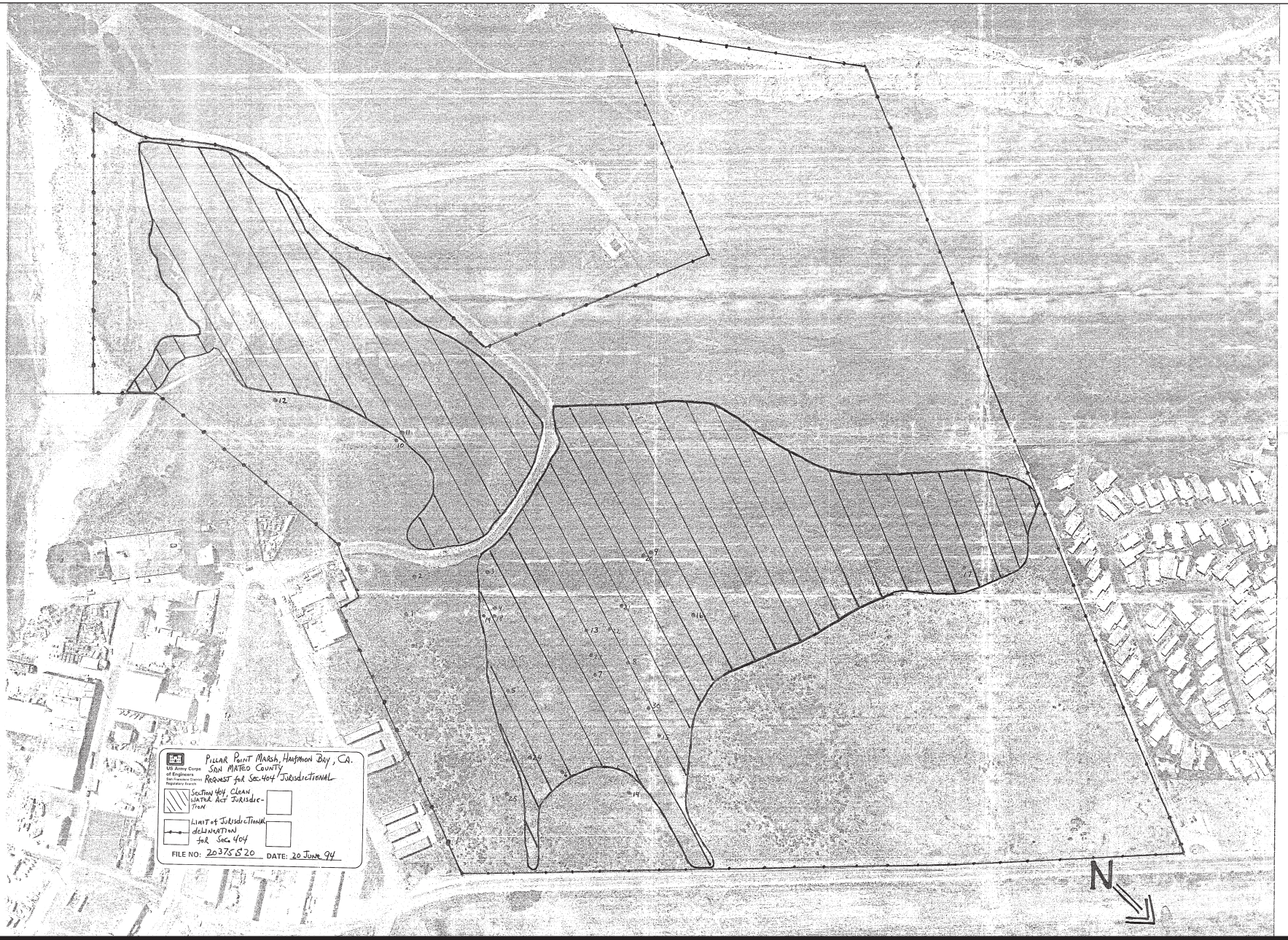
SHEET:
FIGURE 10

Figure 11. Typicals for installation of above and below ground wood.



Addition to Appendix E of DEIR:

2) Army Corps of Engineers (ACOE) map is titled “Pillar Point Marsh, Half Moon Bay, CA., San Mateo County, Request for Sec. 404 Jurisdictional (File No. 20375S20),” dated June 20, 1994.



San Mateo County - Big Wave Final EIR

FIGURE: C

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Addition to Appendix J of DEIR:

Big Wave Office Park and Wellness Center Traffic Report, prepared by Hexagon Transportation Consultants, Inc. (Hexagon), June 24, 2009.

Big Wave Office Park and Wellness Center

Traffic Report

Prepared for:

Christopher A. Joseph and Associates

Prepared by:

Hexagon Transportation Consultants, Inc.

Updated June 24, 2009

06GB56

Table of Contents

Appendices

List of Tables

List of Figures

Executive Summary

This report presents the results of the traffic impact analysis conducted for the Big Wave Office Park and Wellness Center. The project site is located on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County. The project includes a Wellness Center with the following components:

- 43 one-bedroom units for developmentally disabled adults
- 7 two-bedroom units for developmentally disabled adults
- 5 breezeway units with 4 bedrooms each which can house up to 20 residents/staff aides
- 20,000 s.f. of storage space
- 5,326 s.f. of community center (Pool/Fitness Center)

In addition to the Wellness Center, the proposed project would include 90,000 s.f. of general office, 56,250 s.f. of research and development, 33,750 s.f. of storage and 45,000 s.f. of light manufacturing. The project would have five full-access driveways on Airport Street. Parking for the project would be provided on site. Currently the site is vacant.

The potential impacts of the project were evaluated in accordance with the standards set forth by the County of San Mateo. The study included an analysis of AM and PM peak-hour traffic conditions at one signalized intersection and seven unsignalized intersections.

Project Trip Generation

Application of ITE standard trip generation rates to the proposed development shows that the project is estimated to generate 2,123 daily trips, including 292 trips (243 inbound and 49 outbound) during the AM peak hour, and 268 trips (63 inbound and 206 outbound) during the PM peak hour.

Project Traffic Impacts and Mitigation Measures

The analysis showed that the project would not cause any significant impacts, either alone or cumulatively, on traffic conditions at the signalized and unsignalized study intersections. The intersection level of service results are summarized in Table ES-1.

Recommended Improvements

The following measure is recommended in conjunction with the proposed project:

Highway 1 at Cypress Avenue. Based on project and cumulative with and without project conditions, the peak hour signal warrant is met at the intersection of Highway 1 at Cypress Avenue. With this improvement, the Highway 1/Cypress Avenue intersection would operate at LOS A during both the AM and PM peak hours. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand.

Site Access and Circulation

The site review is based on the site plan dated 2008 by Macleod and Associates. The site access was evaluated in accordance with generally accepted traffic engineering standards. Access to the site would be provided by five two-way driveways on Airport Street – two driveways to access the Wellness Center (the southern portion of the project site) and three to the Office Park site (the larger portion of the project site located to the north). Two of the Office Park driveways have an island separating ingress and egress. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers exiting the site.

On-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 drive aisles proposed are approximately 24 feet in width. This aisle dimension is satisfactory for two-way vehicle flow with 90-degree parking. There are no proposed dead-end aisles.

Table ES 1
Intersection Level of Service Summary

# Intersection	Peak Hour	Existing				Background				Project				Cumulative w/o Project				Cumulative w/ Project			
		Average		Worst		Average		Worst		Average		Worst		Average		Worst		Average		Worst	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1 Prospect & Capistrano	AM	7.0	A	9.1	A	6.9	A	9.1	A	7.4	A	9.4	A	7.1	A	9.3	A	7.5	A	9.6	A
	PM	7.4	A	10.1	B	7.3	A	10.3	B	8.1	A	11.0	B	7.7	A	11.1	B	8.5	A	11.9	B
2 Broadway & Prospect	AM	8.1	A	9.5	A	8.1	A	9.6	A	10.1	A	11.8	B	8.3	A	9.9	A	10.7	A	12.8	B
	PM	8.2	A	10.1	B	8.3	A	10.3	B	10.9	A	13.8	B	8.6	A	11.0	B	12.1	A	16.0	C
3 Airport & Stanford/Cornell	AM	2.0	A	9.6	A	2.1	A	9.5	A	5.1	A	10.7	B	2.1	A	9.7	A	4.8	A	11.0	B
	PM	2.6	A	9.7	A	2.6	A	11.5	B	4.7	A	11.9	B	2.7	A	10.0	A	4.6	A	11.9	B
4 Airport & La Granada	AM	6.8	A	9.1	A	6.6	A	9.1	A	4.6	A	9.9	A	6.7	A	9.3	A	5.0	A	10.2	B
	PM	5.1	A	9.5	A	5.0	A	9.5	A	3.7	A	10.0	B	5.1	A	9.9	A	4.0	A	10.4	B
5 Airport & Los Banos	AM	3.0	A	8.9	A	3.1	A	8.9	A	2.2	A	8.9	A	3.1	A	9.0	A	2.4	A	9.6	A
	PM	1.5	A	9.2	A	1.6	A	9.2	A	1.4	A	9.7	A	1.7	A	9.4	A	1.5	A	9.9	A
6 Hwy 1 & Cypress	AM	2.1	A	22.4	C	2.1	A	22.4	C	3.1	A	28.7	D	3.1	A	34.6	D	5.1	A	52.7	F
	PM	2.0	A	26.3	D	2.0	A	26.3	D	6.9	A	59.8	F	3.2	A	46.0	E	18.2	C	177.7	F
7 Hwy 1 & Capistrano (South)*	AM	24.0	C	-	-	25.4	C	-	-	26.1	C	-	-	26.0	C	-	-	26.9	C	-	-
	PM	23.0	C	-	-	24.9	C	-	-	25.4	C	-	-	25.5	C	-	-	26.3	C	-	-
8 Hwy 1 & Capistrano (North)	AM	0.2	A	13.5	B	0.2	A	15.1	C	0.2	A	15.1	C	0.2	A	17.3	C	0.2	A	17.3	C
	PM	0.4	A	16.3	C	0.6	A	18.5	C	0.6	A	18.5	C	0.7	A	23.2	C	0.7	A	23.2	C

*Signalized Intersection

1. Introduction

This report presents the results of the traffic impact analysis conducted for the Big Wave Office Park and Wellness Center. The project site is located on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County. The project includes a Wellness Center with the following components:

- 43 one-bedroom units for developmentally disabled adults
- 7 two-bedroom units for developmentally disabled adults
- 5 breezeway units with 4 bedrooms each which can house up to 20 residents/staff aides
- 20,000 s.f. of storage space
- 5,326 s.f. of community center (Pool/Fitness Center)

In addition to the Wellness Center, the proposed project would include 90,000 s.f. of general office, 56,250 s.f. of research and development, 33,750 s.f. of storage and 45,000 s.f. of light manufacturing. The project would have five full-access driveways on Airport Street. Parking for the project would be provided on site. Currently the site is vacant. The project site and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

Scope of Study

This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. The impacts of the project were evaluated following the standards and methodologies set forth by the County of San Mateo.

The traffic analysis is based on peak-hour levels of service for 1 signalized and 7 unsignalized intersections. The study intersections are identified below.

Study Intersections

Prospect Way and Capistrano Road
Broadway Avenue and Prospect Way
Airport Street and Stanford/Cornell Avenue
Airport Street and La Granada Avenue
Airport Street and Los Banos Avenue
State Route 1 (Cabrillo Highway) and Cypress Avenue
State Route 1 and Capistrano Road (South)*
State Route 1 and Capistrano Road (North)

*signalized intersection

Traffic conditions at the intersections were analyzed for the weekday AM and PM peak hours of traffic. Locally, the AM peak hour of traffic is usually between 7:00 and 9:00 AM. The PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods that the most congested traffic conditions occur on an average day.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing conditions are represented by existing traffic volumes on the existing roadway network. Existing traffic volumes were obtained from recent traffic counts.

Scenario 2: *Background Conditions.* Background traffic conditions are represented by background traffic volumes on the existing roadway network. Background traffic volumes were estimated by adding to existing traffic counts the additional traffic generated by approved developments in the area.

Scenario 3: *Project Conditions.* Project traffic conditions are represented by Background plus Project traffic volumes on the existing roadway network. Background plus Project traffic volumes (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 (Future) Conditions.* Cumulative (20-year horizon) conditions were evaluated with and without the proposed project. Traffic volumes under cumulative conditions were estimated by applying a growth factor to existing volumes and adding trips from approved developments. Project trips were then added in the cumulative with project scenario.

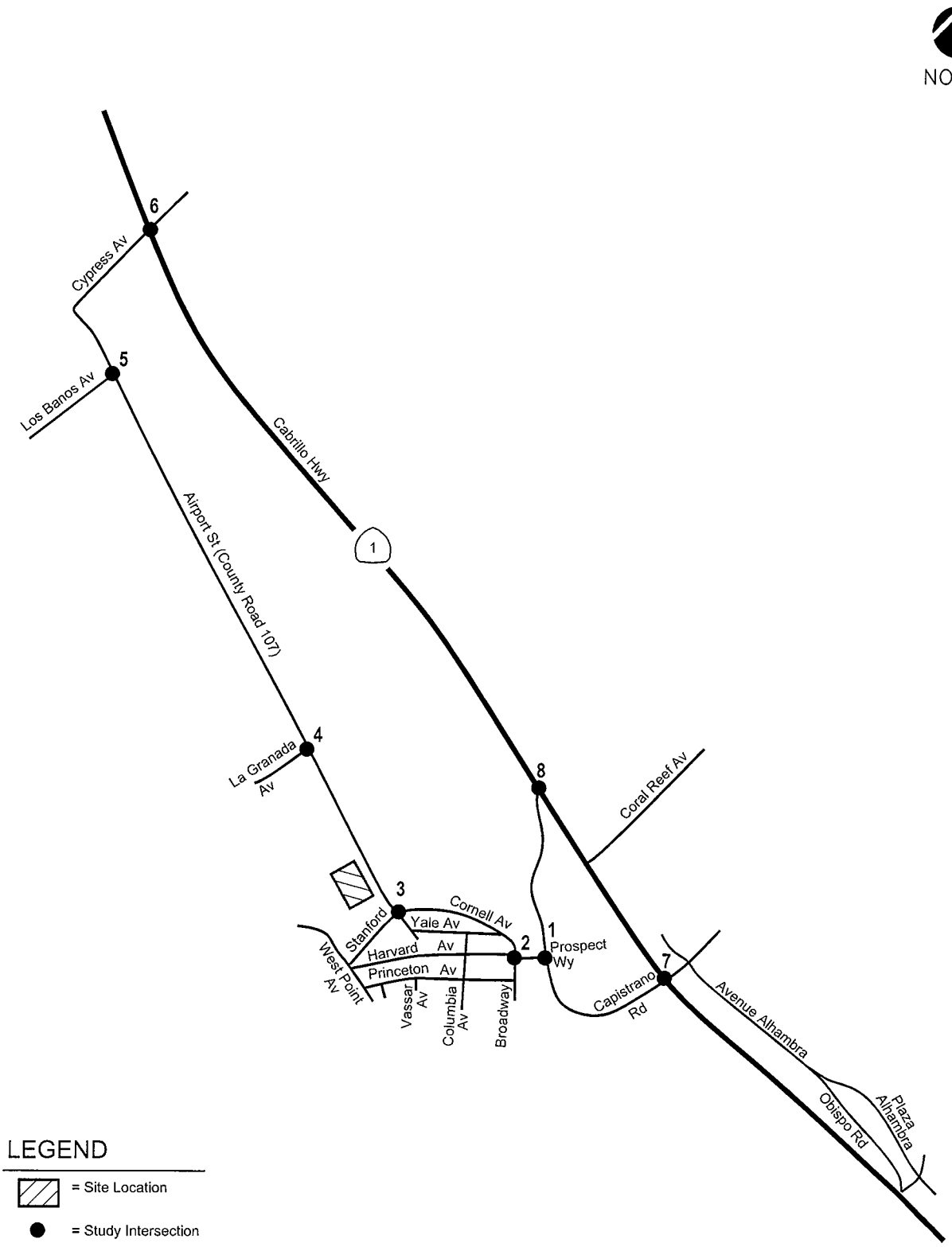

Figure 1

SITE LOCATION AND STUDY INTERSECTIONS

Hexagon Transportation Consultants, Inc.

Big Wave Office Park and Wellness Center

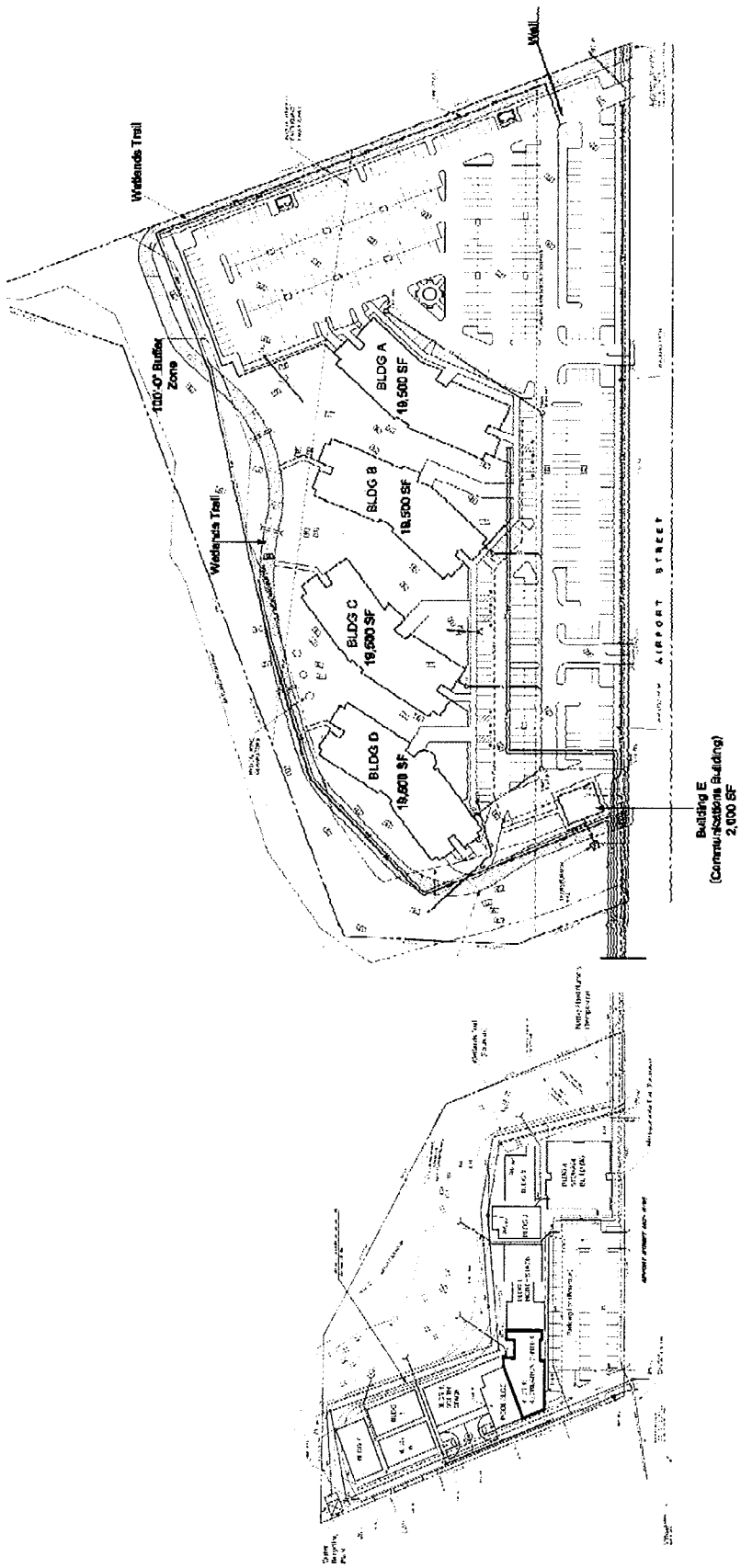

Figure 2

SITE PLAN

Big Wave Office Park and Wellness Center

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Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts, the County of San Mateo, and field observations and reconnaissance. The following data were collected from these sources:

- existing traffic volumes
- intersection lane configurations
- signal timing and phasing
- previous traffic studies
- approved trips

Analysis Methodologies and Level of Service Standards

Traffic conditions at the study locations were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The analysis method is described below.

This study utilizes TRAFFIX software to determine level of service. TRAFFIX methodology 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 as shown in Table 1 for signalized intersections. The level of service correlation for unsignalized intersections is shown in Table 2. For two-way stop controlled intersections, the level of service reported is the average delay of all the intersection movements.

In addition to the level of service evaluation an assessment is made of the need for signalization of unsignalized intersections. This assessment is made on the basis of the Peak-hour Volume Signal Warrant as described in the Manual on Uniform Traffic Control Devices (MUTCD), 2003. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Significant Impact Criteria

Significance criteria are used to establish what constitutes an impact. For this analysis the relevant criteria for impacts at intersections are based on the County of San Mateo intersection Level of Service standards.

County of San Mateo Definitions of Significant Intersection LOS Impacts

According to the County of San Mateo level of service guidelines, a development is said to create a significant adverse impact on traffic conditions at a signalized intersection if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better (for CMP

intersections the minimum acceptable level of service is LOS E) under baseline conditions to an unacceptable LOS E or F under project conditions, or

2. The level of service at the intersection is an unacceptable LOS E or LOS F under baseline conditions and the addition of project trips causes the critical-movement volume-to-capacity ratio (V/C) to increase by .02 or more.

A significant impact at a signalized intersection is said to be satisfactorily mitigated when measures are implemented that would restore intersection operations back to background (without the project) conditions or better.

Table 1
Signalized 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.

Report Organization

The remainder of this report is divided into five chapters. Chapter 2 describes existing conditions on the existing roadway network. Chapter 3 discusses background conditions. Chapter 4 describes the method used to estimate project traffic, and documents project impacts. Chapter 5 presents cumulative conditions with and without the project. Chapter 6 contains the conclusions of the analysis.

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*.

2.
Existing Conditions

This chapter describes the existing conditions on the roadway network in the vicinity of the site.

Existing Roadway Network

Access to the project site is provided via State Route 1, Capistrano Road and Airport Street. These facilities are described below.

State Route 1 is a two- to four-lane highway that runs in a north-south direction. Route 1 extends from San Francisco to southern California along the Pacific Ocean coast.

Capistrano Road is a two-lane roadway that runs primarily in a north-south direction. This local roadway extends from Alhambra Avenue in the south (just west of State Route 1) to its terminus at State Route 1 in the north.

Airport Street is a two-lane north-south collector street that provides access to the project site. Airport Street extends from its intersection with Stanford Avenue/Cornell Avenue in the south where it operates as Vassar Street to its terminus at Cypress Avenue in the north.

Other local roadways in the project vicinity include: *Cypress Avenue, Prospect Way, Coral Reef Avenue, Los Banos Avenue, La Granada Avenue, Broadway Avenue, Stanford Avenue and Cornell Avenue* which are two-lane residential roadways.

Existing Bicycle and Pedestrian Facilities

According to the Bicycle Transportation Map of the San Francisco Peninsula for San Mateo County, there are the following designated bike routes within the vicinity of the project site:

- State Route 1 within the vicinity of the project site

- Airport Street within the vicinity of the project site
- Cypress Avenue between Airport Street and State Route 1
- Capistrano Road between State Route 1 and Prospect Way
- Prospect Way
- California Avenue
- Cornell Avenue

Bicycle facilities are shown on Figure 3.

There are generally no sidewalks in the project vicinity. The Princeton area of Half Moon Bay is somewhat rural. Airport Street has and minimal fronting development, thus no existing need for sidewalks.

Existing Transit Service

Existing transit service to the study area is provided by the San Mateo County Transit District (SamTrans). The existing SamTrans service is described below and shown on Figure 4.

The 17 *line* provides service between the Seton Medical Center Coastside and the Miramontes Point Road area with 1- to 2-hour headways (according to SamTrans staff) and operates along Airport Street in the vicinity of the project. Route 17 bus stops in the project vicinity are as follows:

- Capistrano Road at Pillar Point Harbor
- Capistrano Road at Prospect Way
- Airport Street at La Granada*
- Airport Street at Los Banos Avenue

*closest to project site

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by field reconnaissance. The existing intersection lane configurations are shown on Figure 5.

Existing Traffic Volumes

Existing peak-hour traffic volumes were obtained from new manual turning-movement counts at all of the study intersections. The existing peak-hour volumes are shown on Figure 6 and included in Appendix A.

Existing Intersection Levels of Service

The results of the level of service analysis under existing conditions show that all of the study intersections currently operate at an acceptable LOS D or better (see Table 3). For the unsignalized intersections, the table reports the average delay and level of service for the intersection overall as well as the worst turning movement delay and level of service. The level of service calculation sheets are included in Appendix B.

Existing Signal Warrants

The peak-hour signal warrant (*MUTCD 2003*, Urban Warrant) was checked for the seven 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.

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, and (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field.

Overall the study intersections operated adequately during both the AM and PM peak hours of traffic, and the level of service analysis appears to accurately reflect actual existing traffic conditions.

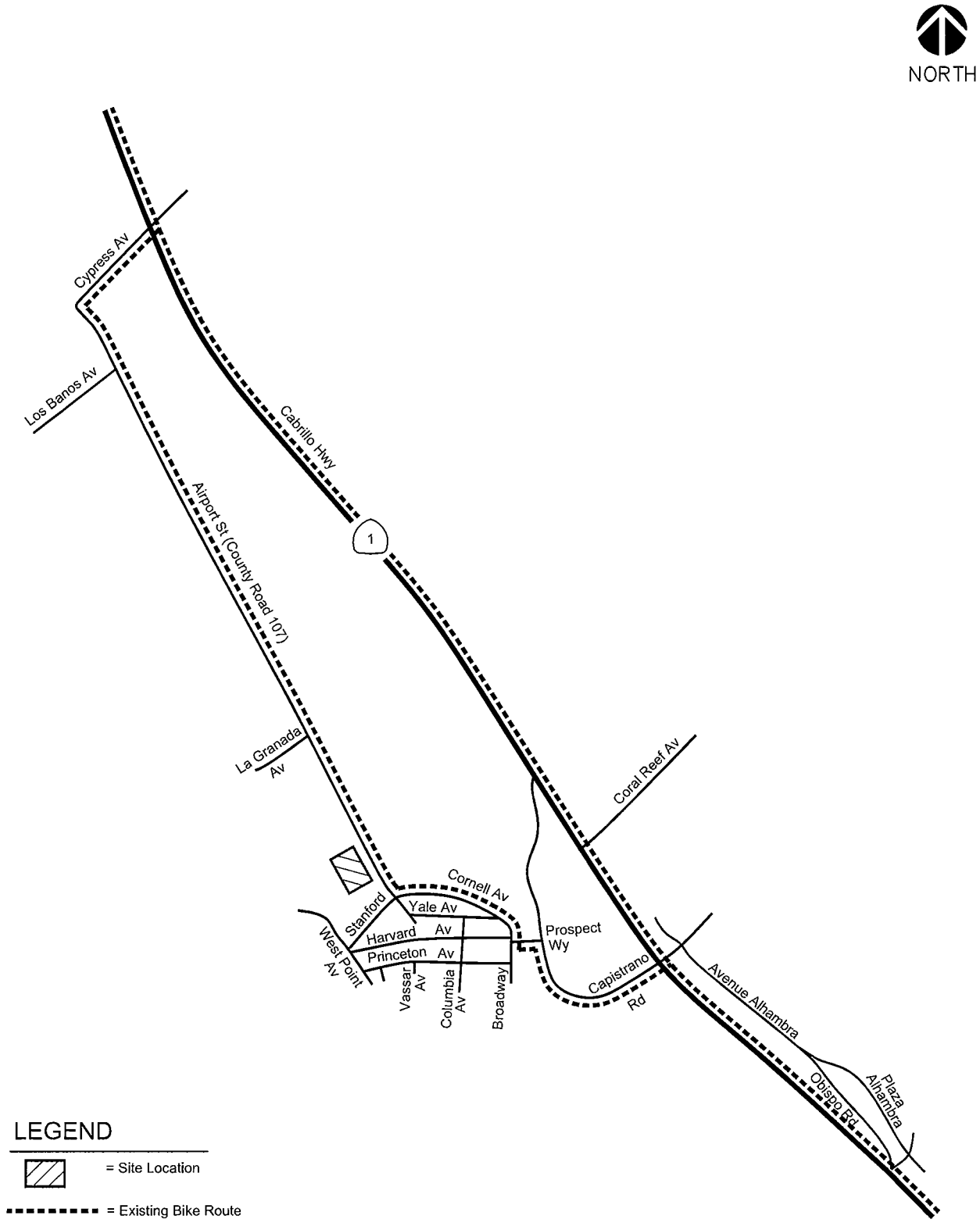

Figure 3

EXISTING BICYCLE FACILITIES

Big Wave Office Park and Wellness Center

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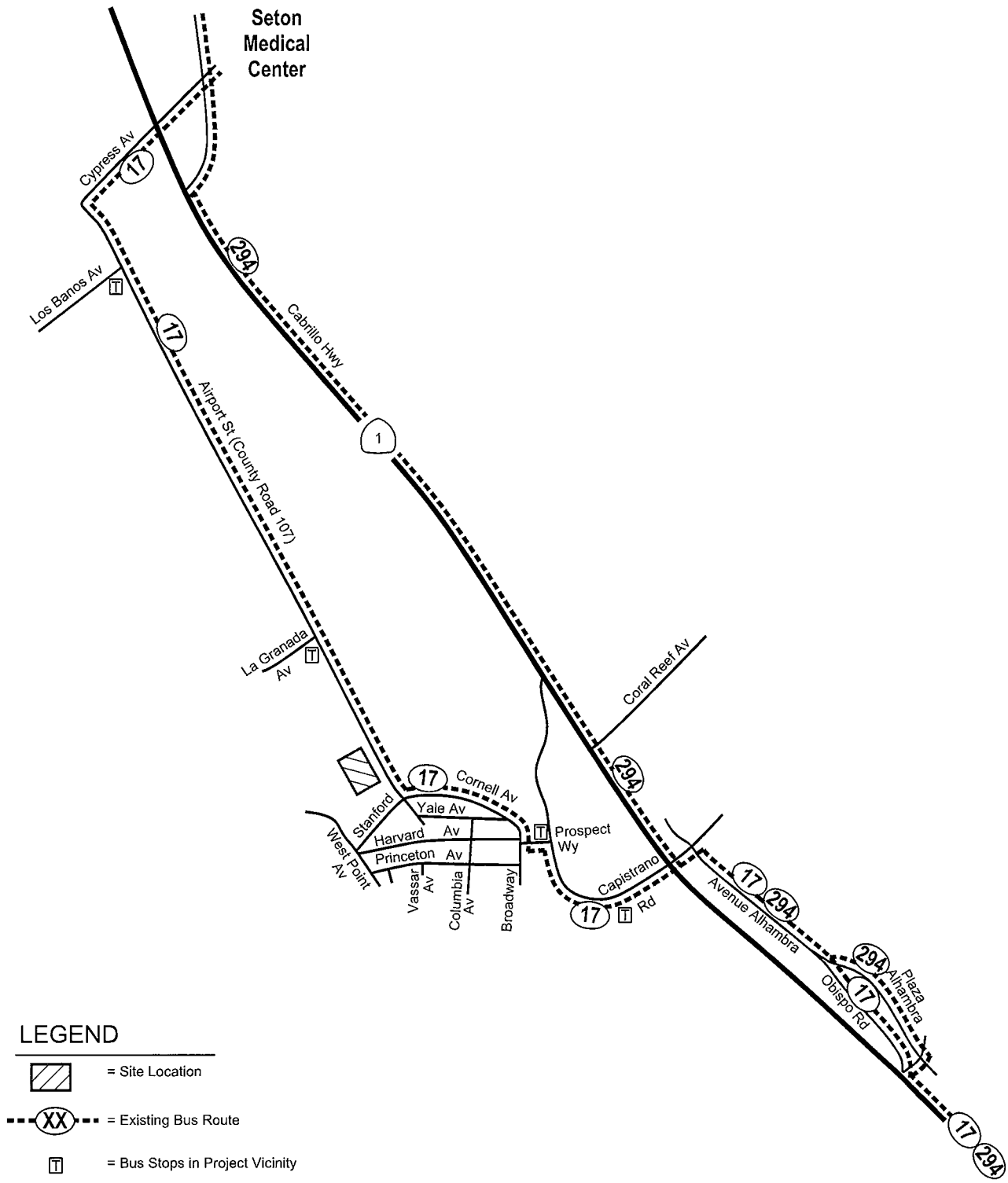

Figure 4

EXISTING TRANSIT FACILITIES

Big Wave Office Park and Wellness Center

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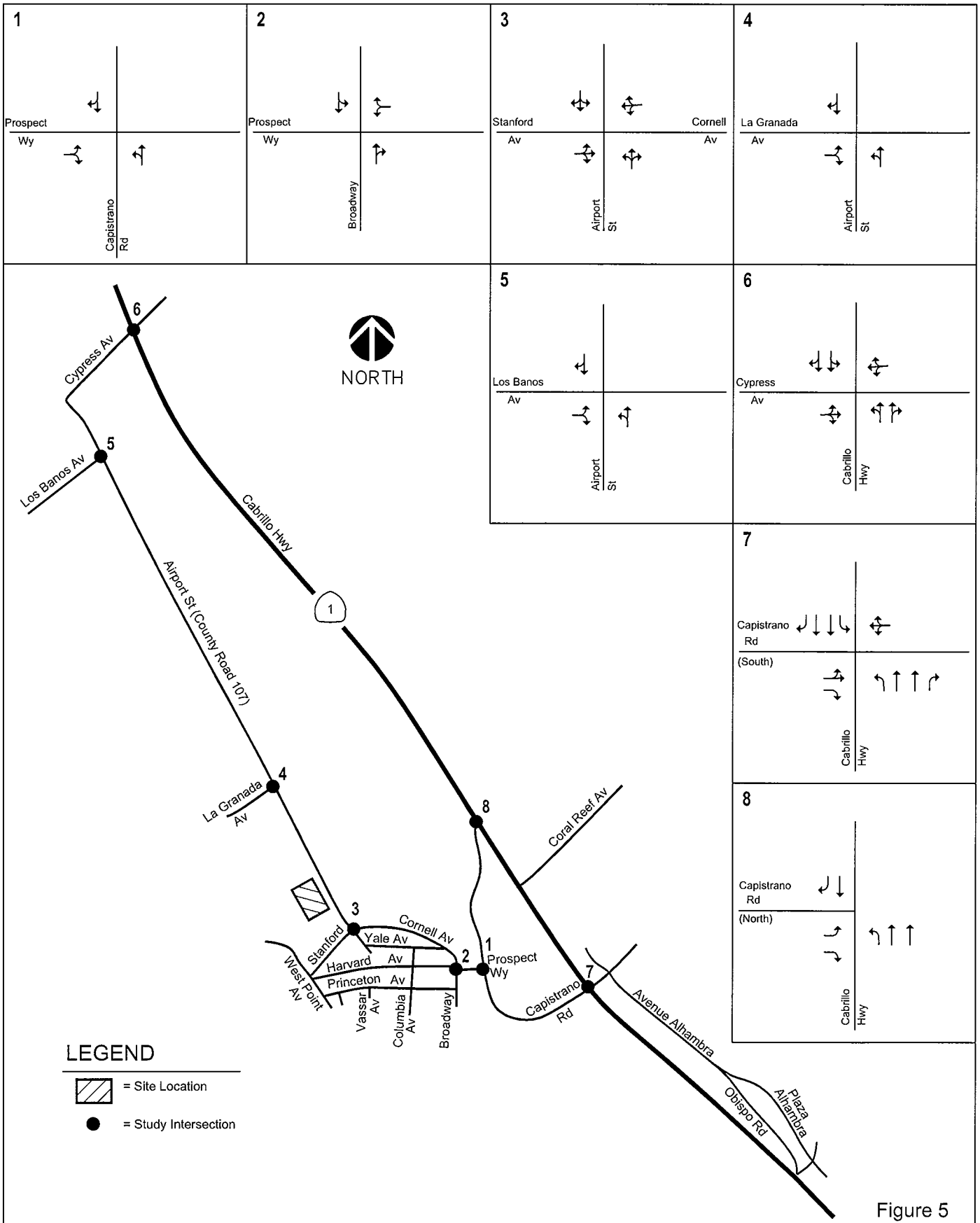

Figure 5

EXISTING LANE CONFIGURATIONS

Big Wave Office Park and Wellness Center

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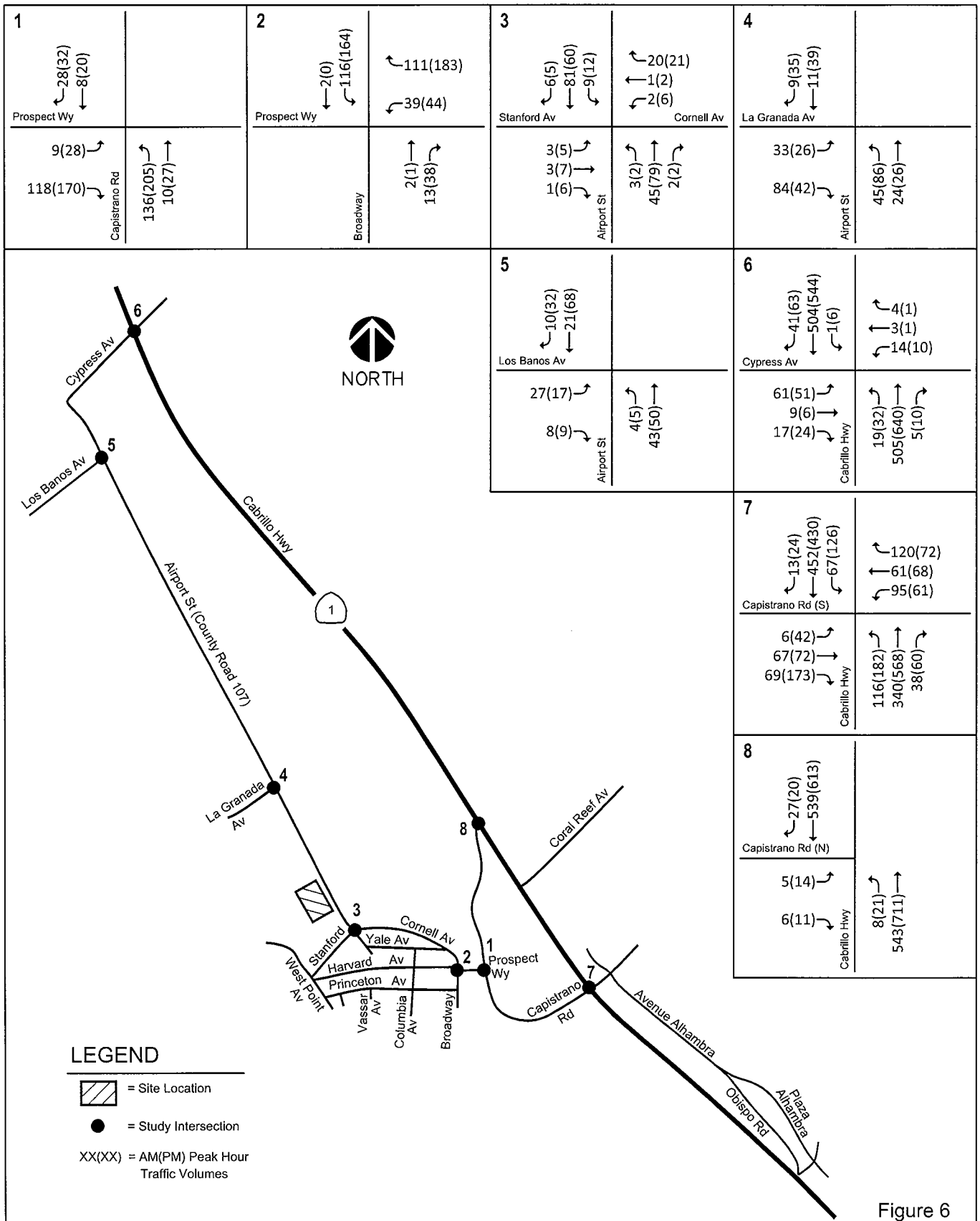

Figure 6

EXISTING TRAFFIC VOLUMES

Big Wave Office Park and Wellness Center

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Table 3
Existing Intersection Levels of Service

# Intersection	Peak Hour	Count Date	Average Delay	Average LOS	Worst Delay	Worst LOS
1 Prospect & Capistrano	AM	01/18/07	7.0	A	9.1	A
	PM	01/18/07	7.4	A	10.1	B
2 Broadway & Prospect	AM	01/18/07	8.1	A	9.5	A
	PM	01/18/07	8.2	A	10.1	B
3 Airport & Stanford/Cornell	AM	01/17/07	2.0	A	9.6	A
	PM	01/17/07	2.6	A	9.7	A
4 Airport & La Granada	AM	01/17/07	6.8	A	9.1	A
	PM	01/17/07	5.1	A	9.5	A
5 Airport & Los Banos	AM	01/17/07	3.0	A	8.9	A
	PM	01/17/07	1.5	A	9.2	A
6 Hwy 1 & Cypress	AM	01/16/07	2.1	A	22.4	C
	PM	01/16/07	2.0	A	26.3	D
7 Hwy 1 & Capistrano (South)*	AM	01/18/07	24.0	C	-	-
	PM	01/18/07	23.0	C	-	-
8 Hwy 1 & Capistrano (North)	AM	01/16/07	0.2	A	13.5	B
	PM	01/16/07	0.4	A	16.3	C

*Signalized Intersection

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.

Background Roadway Network

It is assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network.

Approved Developments

Table 4 lists the approved but not-yet-completed developments in the project vicinity, which would add traffic to the roadway network under background conditions. The first seven approved developments on the list were obtained from the County of San Mateo for the initial iteration of the study in 2007. The county requested that the approved developments list be updated for this revision. As a result, the last five approved developments on the list were obtained from the County and added to the Background Condition scenario in June 2009. The traffic associated with these developments is discussed below.

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 latter are called approved trips, and were obtained or derived from information provided by the County of San Mateo. The traffic added to the study intersections from approved but not yet constructed developments was estimated by distributing and assigning trips generated by these developments to the roadway network. The process of trip generation,

Table 4
Approved Developments

Land Use	Size	Location
Restaurant Addition	1,600 s.f.	214 Princeton Ave.
Boat and Machine Storage	3,163 s.f.	179 Harvard Ave.
Warehouse/office	3,625 s.f.	175 Harvard Ave.
Warehouse	4,346 s.f.	141 California Ave.
Warehouse/office	4,346 s.f.	121 California Ave.
Hotel/meeting/extended stay	84 short stay rooms & 11 extended stay rooms, meeting rooms	240 Capistrano Rd.
Restaurant and retail	8,697 s.f. restaurant, 40,000 s.f. retail	240 Capistrano Rd.
Marine Sales	3,450 s.f.	W. Point Avenue
Storage/office/vacation rental	3,425 s.f.	Princeton Ave. at Columbia Ave.
Indoor Storage/marine usage	3,155 s.f.	151 Vassar St.
Mixed-Use	2,374 s.f.	358 Princeton Ave.
Warehouse/office	1,982 s.f.	102 California Ave.

Source: San Mateo County Planning & Building Division
Trip generation rates from ITE Trip Generation Manual, 7th or 8th Edition.

distribution, and assignment is described further in the following chapter. Background traffic volumes are shown on Figure 7. The approved trip assignments are included in Appendix C.

Background Intersection Levels of Service

The results of the level of service analysis under background conditions show that all of the study intersections would operate at an acceptable LOS C or better (see Table 5). The level of service calculation sheets are included in Appendix B.

Background Signal Warrants

The peak-hour signal warrant (*MUTCD 2003*, Urban Warrant) was checked for the seven unsignalized intersections to determine whether signalization would be justified on the basis of background peak-hour volumes. The analysis showed that none of the study intersections would meet the signal warrant under background conditions. The signal warrant analysis sheets are included in Appendix E.

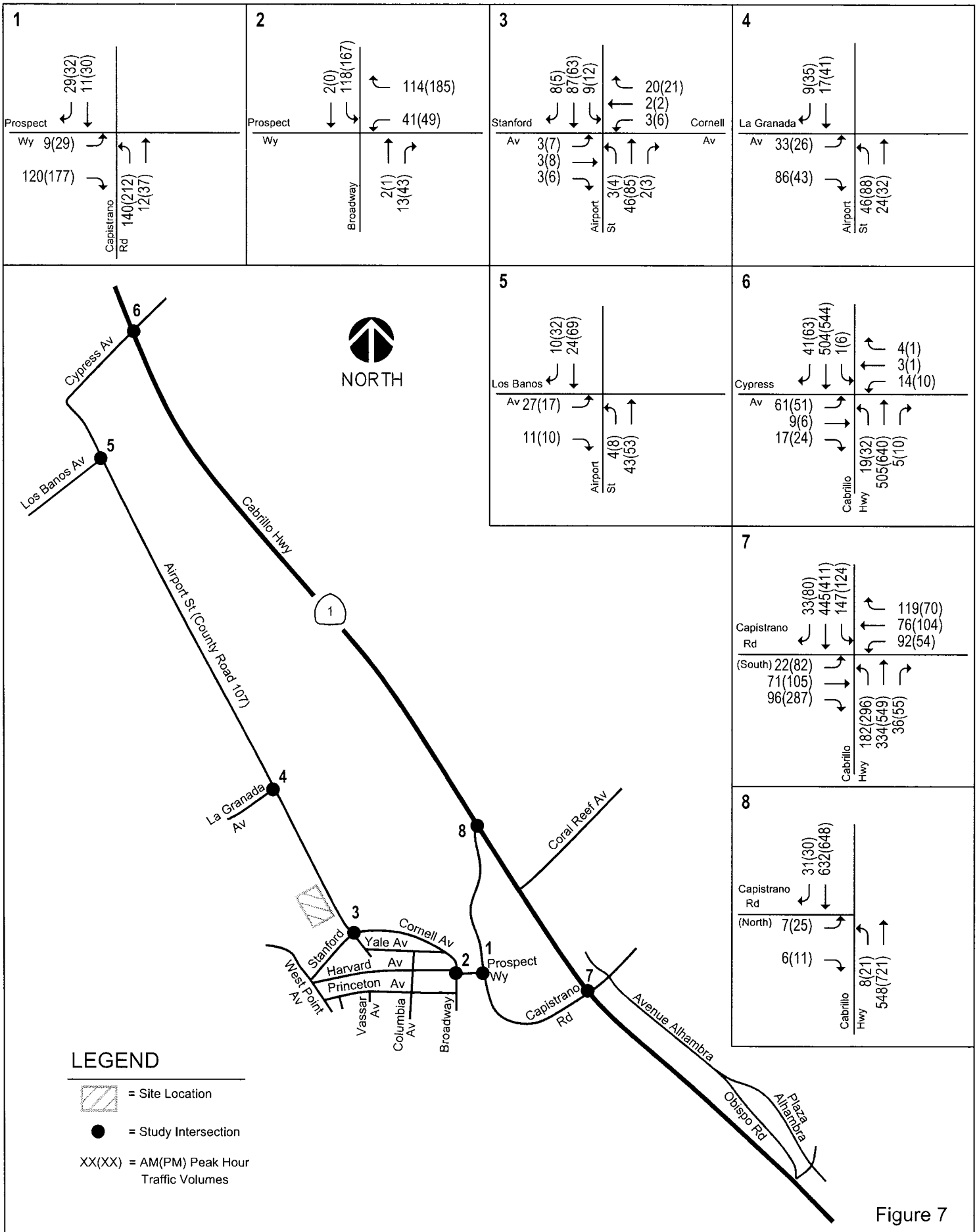


Figure 7

BACKGROUND TRAFFIC VOLUMES

Big Wave Office Park and Wellness Center

Hexagon Transportation Consultants, Inc.

Table 5
Background Intersection Levels of Service

# Intersection	Peak Hour	Existing Average Delay	Existing Average LOS	Existing Worst Delay	Existing Worst LOS	Background Average Delay	Background Average LOS	Background Worst Delay	Background Worst LOS
1 Prospect & Capistrano	AM	7.0	A	9.1	A	6.9	A	9.1	A
	PM	7.4	A	10.1	B	7.3	A	10.3	B
2 Broadway & Prospect	AM	8.1	A	9.5	A	8.1	A	9.6	A
	PM	8.2	A	10.1	B	8.3	A	10.3	B
3 Airport & Stanford/Cornell	AM	2.0	A	9.6	A	2.1	A	9.5	A
	PM	2.6	A	9.7	A	2.6	A	11.5	B
4 Airport & La Granada	AM	6.8	A	9.1	A	6.6	A	9.1	A
	PM	5.1	A	9.5	A	5.0	A	9.5	A
5 Airport & Los Banos	AM	3.0	A	8.9	A	3.1	A	8.9	A
	PM	1.5	A	9.2	A	1.6	A	9.2	A
6 Hwy 1 & Cypress	AM	2.1	A	22.4	C	2.1	A	22.4	C
	PM	2.0	A	26.3	D	2.0	A	26.3	D
7 Hwy 1 & Capistrano (South)*	AM	24.0	C	-	-	25.4	C	-	-
	PM	23.0	C	-	-	24.9	C	-	-
8 Hwy 1 & Capistrano (North)	AM	0.2	A	13.5	B	0.2	A	15.1	C
	PM	0.4	A	16.3	C	0.6	A	18.5	C

*Signalized Intersection

4.
Project Impacts and Mitigation Measures

This chapter describes project-generated traffic, project traffic conditions, significant project impacts, and measures that are recommended to mitigate project impacts. Project conditions are defined as background traffic conditions with the addition of traffic generated by the project.

Project Conditions Roadway Network

It is assumed in this analysis that the transportation network under project conditions would be the same as the existing network.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described further in the following sections.

Trip Generation

Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development.

The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates to the size of the development. Standard trip generation

rates are published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation, Eighth Edition,* 2008. The project includes a Wellness Center with the following components:

- 36 one-bedroom units for developmentally disabled adults
- 7 two-bedroom units for developmentally disabled adults
- 5 breezeway units with 4 bedrooms each which can house up to 20 residents/staff aides
- 20,000 s.f. of storage space
- 37,103 s.f. of community center

In addition to the Wellness Center, the proposed project would include 90,000 s.f. of general office, 56,250 s.f. of research and development, 33,750 s.f. of storage and 45,000 s.f. of light manufacturing.

The trip generation estimates for each of these components are described below.

Apartments

One and Two Bedroom Apartment Units – Since it has not yet been determined where the residents versus staff will reside, it is assumed for purposes of this analysis that these apartment units will house developmentally disabled residents. There would be a common recreation area provided for use by all apartment residents. This common area would include a basketball court, an indoor pool and fitness center. As shown in Table 6, these units would not generate any trips as the residents would not drive. The residents would have care-givers residing on the project site that would drive them to and from activities, appointments, errands, etc. The care-giver trips would be included in the breezeway unit trip generation numbers.

Breezeway Units – For purposes of analysis, it is assumed the proposed breezeway apartment units would be for staff members. The breezeway units would be one story in height. They are fourplexes (with single bed/bath units sharing a common living area and kitchen). There are five breezeway fourplexes so the total number of breezeway residential units proposed is 20. According to the project applicant, an option for these units is the addition of a common area that could be opened to the outside and would function as a living room, recreation room or dining room.

Community Center

The community center would provide services for local area residents as well as residents living on the project site. The community center might provide such services as classes, exercise facilities, a location for special events, public meetings, private social functions, etc. Community Center is not a land use for which the ITE manual can be used for trip generation estimates. The estimated trip generation for this portion of the project was based on a survey conducted by Hexagon at the Almaden Community Center located in San Jose, California.

Storage

Storage is proposed as a small portion of the project. This storage would most likely be utilized by project residents or Princeton area residents and would likely not generate any trips outside the study area. The ITE warehousing land use category was utilized to estimate trips for this portion of the project.

Office/Industrial Park

The northernmost and largest section of the proposed project would be an office/industrial park. Hexagon used the ITE general office building category for the 90,000 s.f. general office portion of the project. The research and development component of the project is proposed as being 56,250 s.f. in size. There is a proposed 33,750 s.f. storage component and a 45,000 s.f. light manufacturing component to the office park. This park could draw potential employees from the surrounding residential areas such as Moss Beach, Montara, El Granada and Miramar and other outlying regions.

The estimated peak-hour and daily trip generation totals for the project are shown in Table 6. The table shows that the project is estimated to generate 2,123 daily trips, including 292 trips (243 inbound and 49 outbound) during the AM peak hour, and 268 trips (63 inbound and 206 outbound) during the PM peak hour.

Table 6
Project Trip Generation Estimates

		Daily		AM Peak Hour				PM Peak Hour			
Use	Size	rate[1]	trips	rate[1]	in	out	total	rate[1]	in	out	total
Proposed											
Office Park											
General Office[2]	90,000 s.f.	11.01	991	1.55	123	17	140	1.49	23	111	134
Research & Development[3]	56,250 s.f.	8.11	456	1.22	57	12	69	1.07	9	51	60
Storage[4]	33,750 s.f.	3.56	120	0.30	8	2	10	0.32	3	8	11
Light Manufacturing[5]	45,000 s.f.	3.82	172	0.73	26	7	33	0.73	12	21	33
Wellness Center											
Apartments											
one-bedroom[6]	43 units	n/a	0	n/a	0	0	0	n/a	0	0	0
two-bedroom[6]	7 units	n/a	0	n/a	0	0	0	n/a	0	0	0
breezeway[7]	20 units	6.65	133	0.51	2	8	10	0.62	8	4	12
Storage[4]	20,000 s.f.	3.56	71	0.30	5	1	6	0.32	2	5	6
Community Center[8]	5,326 s.f.	33.80	180	4.57	22	2	24	2.19	7	5	12
	TOTAL		**2,123**		**243**	**49**	**292**		**63**	**206**	**268**

[1]Rates based on ITE Trip Generation Manual, 8th edition average rates - numbers may not add due to rounding.

[2]ITE Code 710, General Office Building

[3]ITE Code 760, Research and Development Center

[4]ITE Code 150, Warehousing.

[5]ITE Code 140, Manufacturing

[6]These units are for the developmentally disabled and will not generate any vehicular trips.

[7]A breezeway unit is a one-story unit that can house up to 4 residents/staff aides. The project is proposing 5 breezeway units (5x4=20). ITE Code 220, Apartment.

[8]Community Center rates based on trip generation survey conducted at the Almaden Community Center located in San Jose, California.

Project Trip Distribution and Assignment

The trip distribution pattern for the proposed project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. Separate trip distribution patterns were developed for each land use component of the proposed project. In determining the trip distribution patterns for vehicles traveling from the project site to northbound Highway 1, Hexagon conducted travel time runs from the proposed project site to northbound Highway 1 using two different routes as per the applicant's request.

The first route included northbound Airport Street and eastbound Cypress Avenue to northbound Highway 1. The second route included southbound Airport Street to eastbound Cornell Avenue to eastbound Prospect Way to northbound Capistrano Road to northbound Highway 1. The travel time runs showed that the northbound Airport Street route took half the time of the southbound Airport Street route (two minutes as opposed to four minutes). As a result, Hexagon assumed that vehicular traffic traveling from the project site to northbound Highway 1 would proceed north on Airport Street to Cypress Avenue and turn left onto Highway 1.

The peak-hour trips generated by the project were assigned to the roadway system using the TRAFFIX software and in accordance with the trip distribution pattern shown. The trip distribution patterns are shown graphically on Figures 8, 9, 10 and 11. Hexagon conducted travel time runs on Wednesday, April 2, 2008. Figure 12 shows the assignment of project trips at each study intersection.

Project Traffic Volumes

Project traffic volumes were estimated by adding to background traffic volumes the project trips. Background plus project traffic volumes are typically referred to simply as *project traffic volumes*; this is contrasted with the term *project trips*, which is used to signify the traffic that is produced specifically by the project. The project traffic volumes are shown graphically on Figure 13. Traffic volumes for all components of traffic are tabulated in Appendix D.

Project Intersection Level of Service Analysis

The results of the level of service analysis under Project Conditions show that all of the study intersections would operate at an acceptable LOS C or better (see Table 7). The eastbound left-turn movement at the intersection of Highway 1 and Cypress Avenue is shown to operate at LOS F with a delay of 59.8 seconds under Project Conditions. Hexagon found that there are no improvements possible at this intersection to improve this LOS F other than signalization as described in the signal warrant analysis section below. The level of service calculation sheets are included in Appendix B.

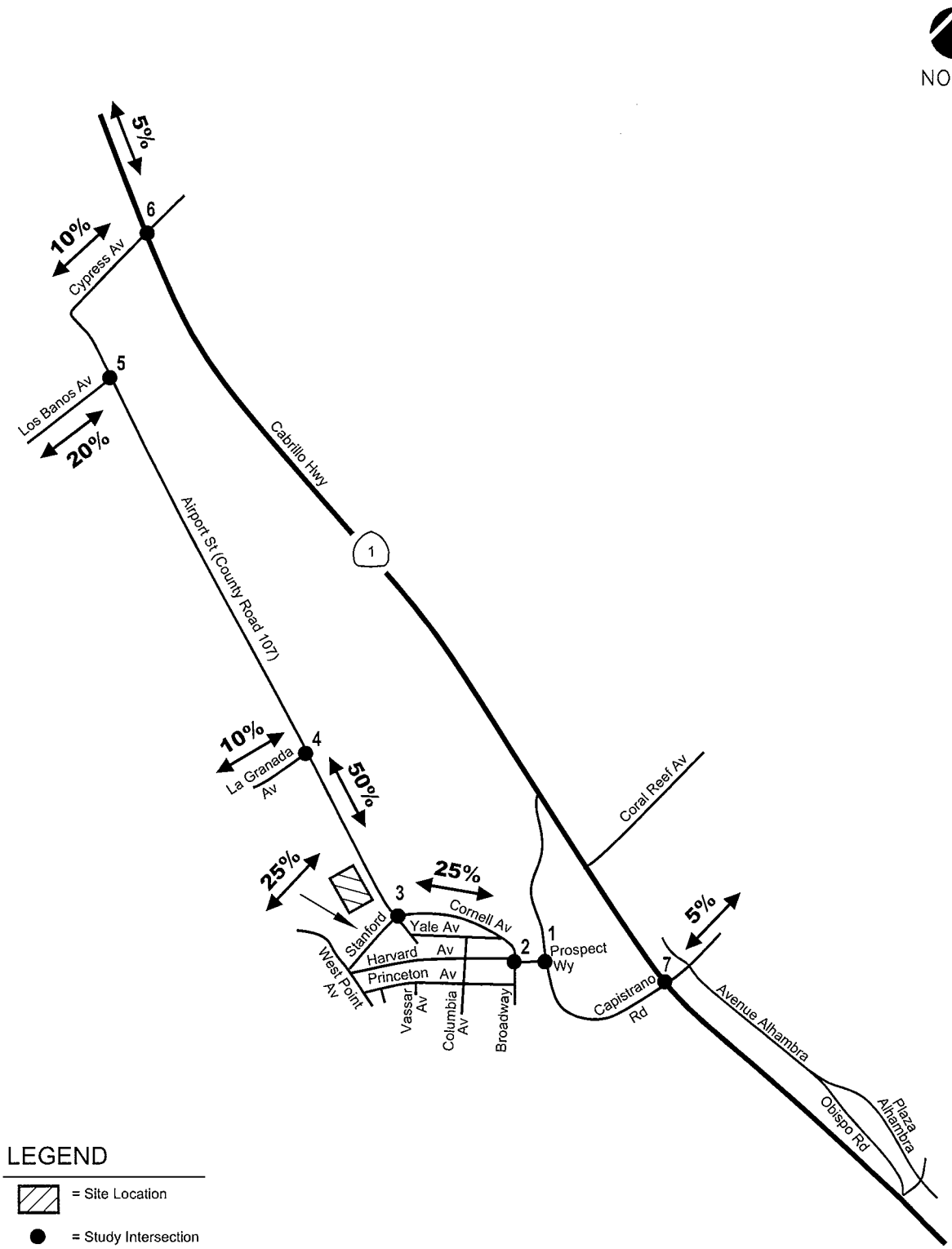


Figure 8

PROJECT TRIP DISTRIBUTION - COMMUNITY CENTER

Big Wave Office Park and Wellness Center

Hexagon
Transportation Consultants, Inc.

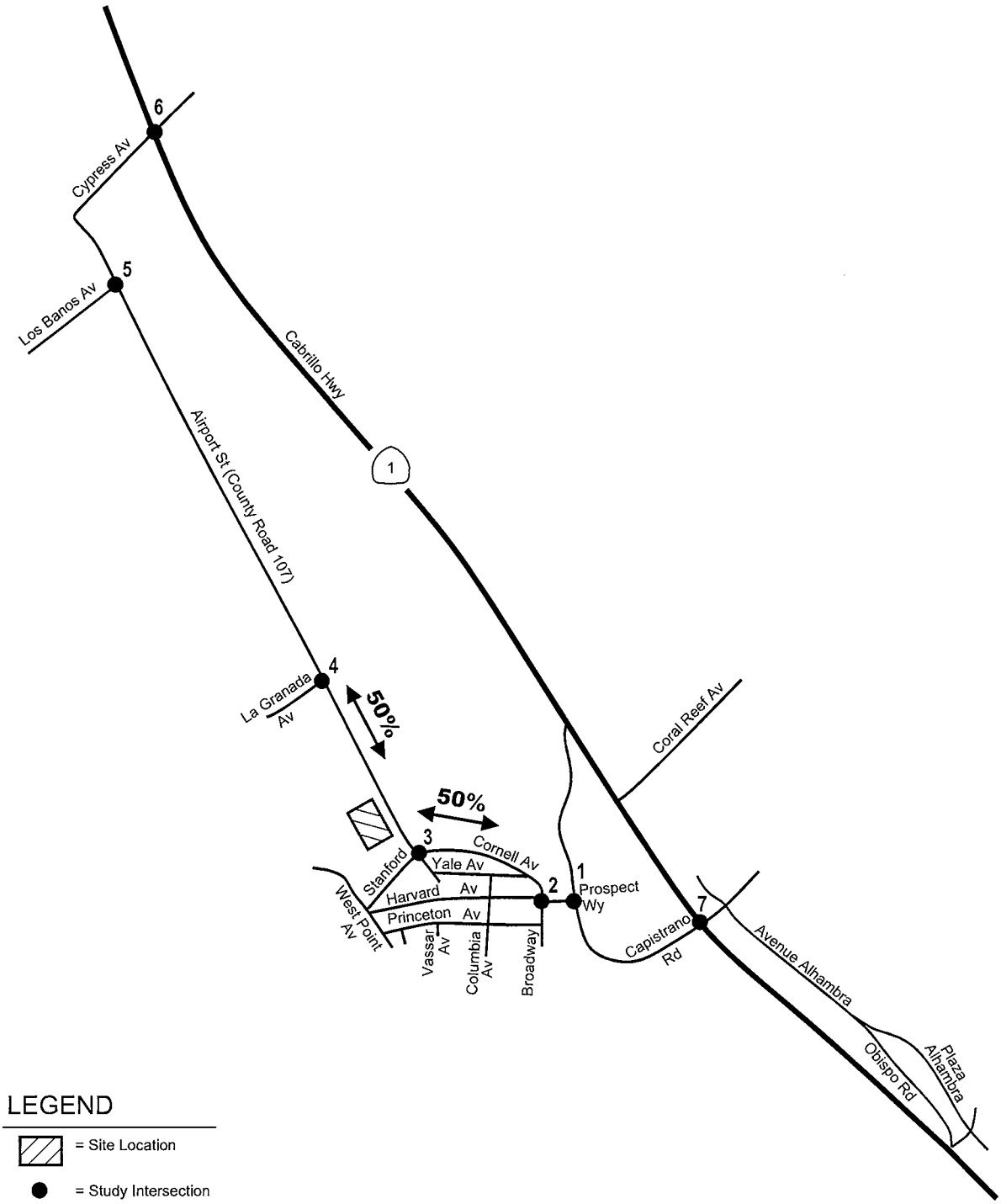


Figure 9

PROJECT TRIP DISTRIBUTION - STORAGE

Big Wave Office Park and Wellness Center

Hexagon
Transportation Consultants, Inc.

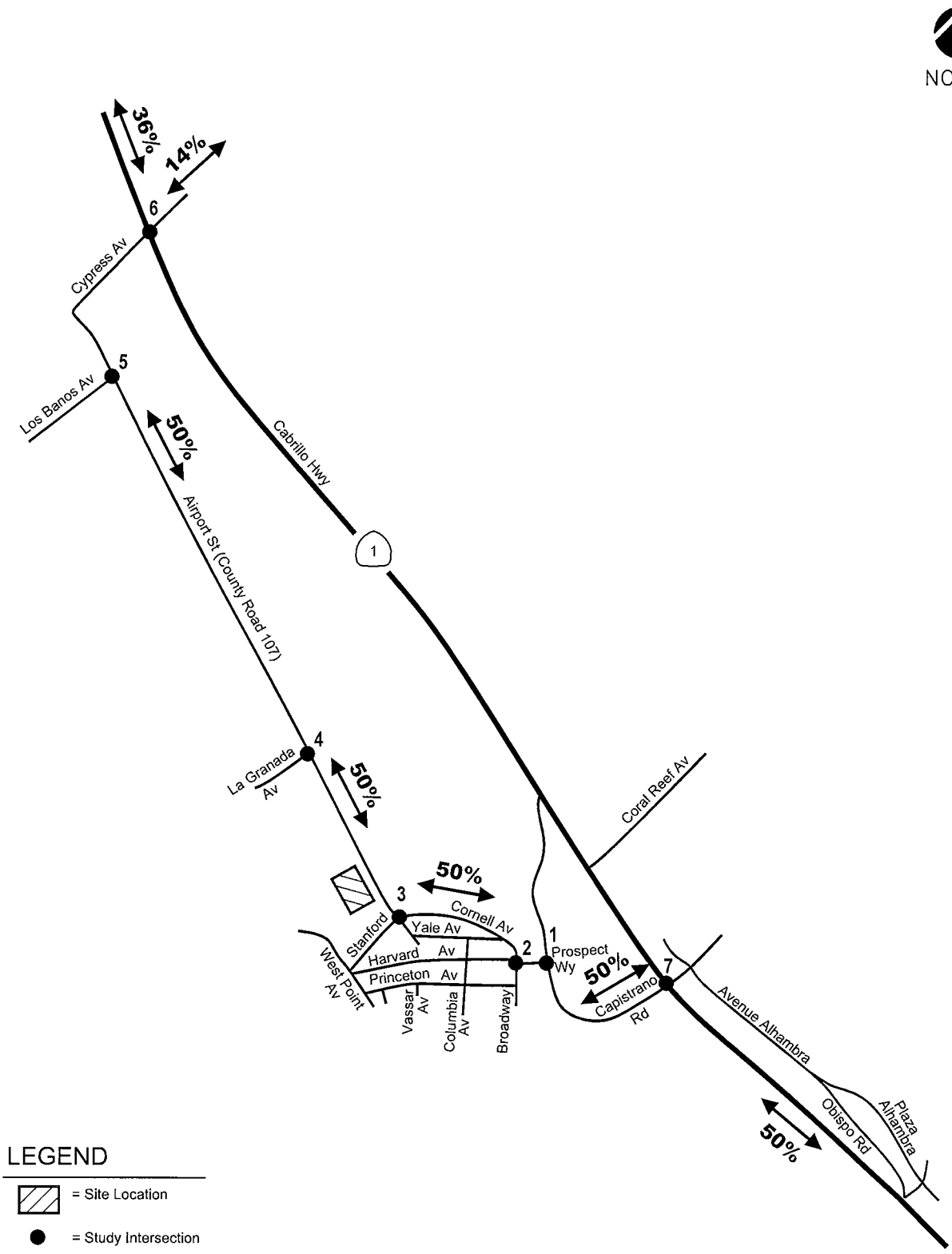


Figure 10

PROJECT TRIP DISTRIBUTION - APARTMENTS

Big Wave Office Park and Wellness Center

Hexagon
Transportation Consultants, Inc.

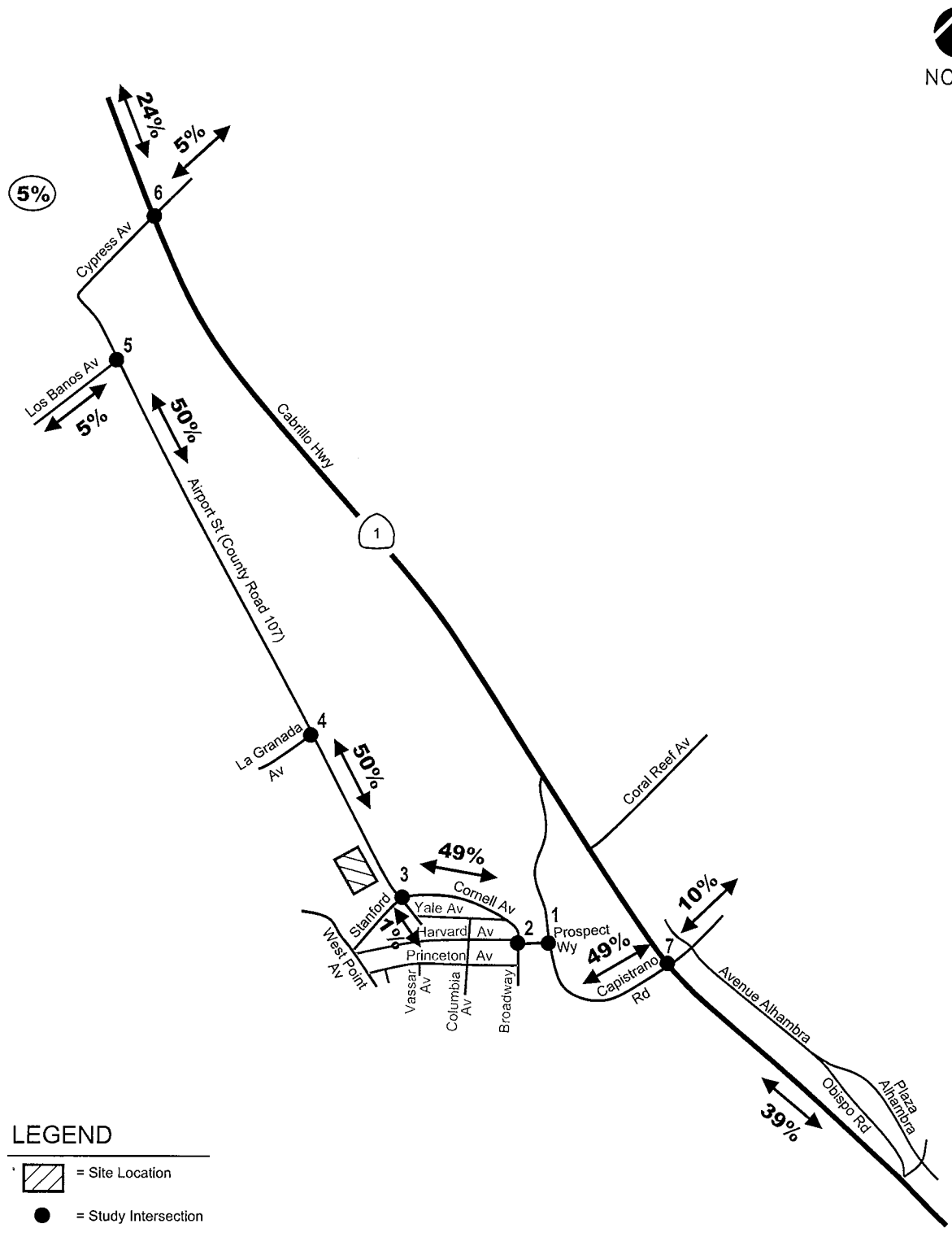


Figure 11

PROJECT TRIP DISTRIBUTION - OFFICE, RESEARCH AND DEVELOPMENT, AND LIGHT MANUFACTURING

Big Wave Office Park and Wellness Center

Hexagon
Transportation Consultants, Inc.

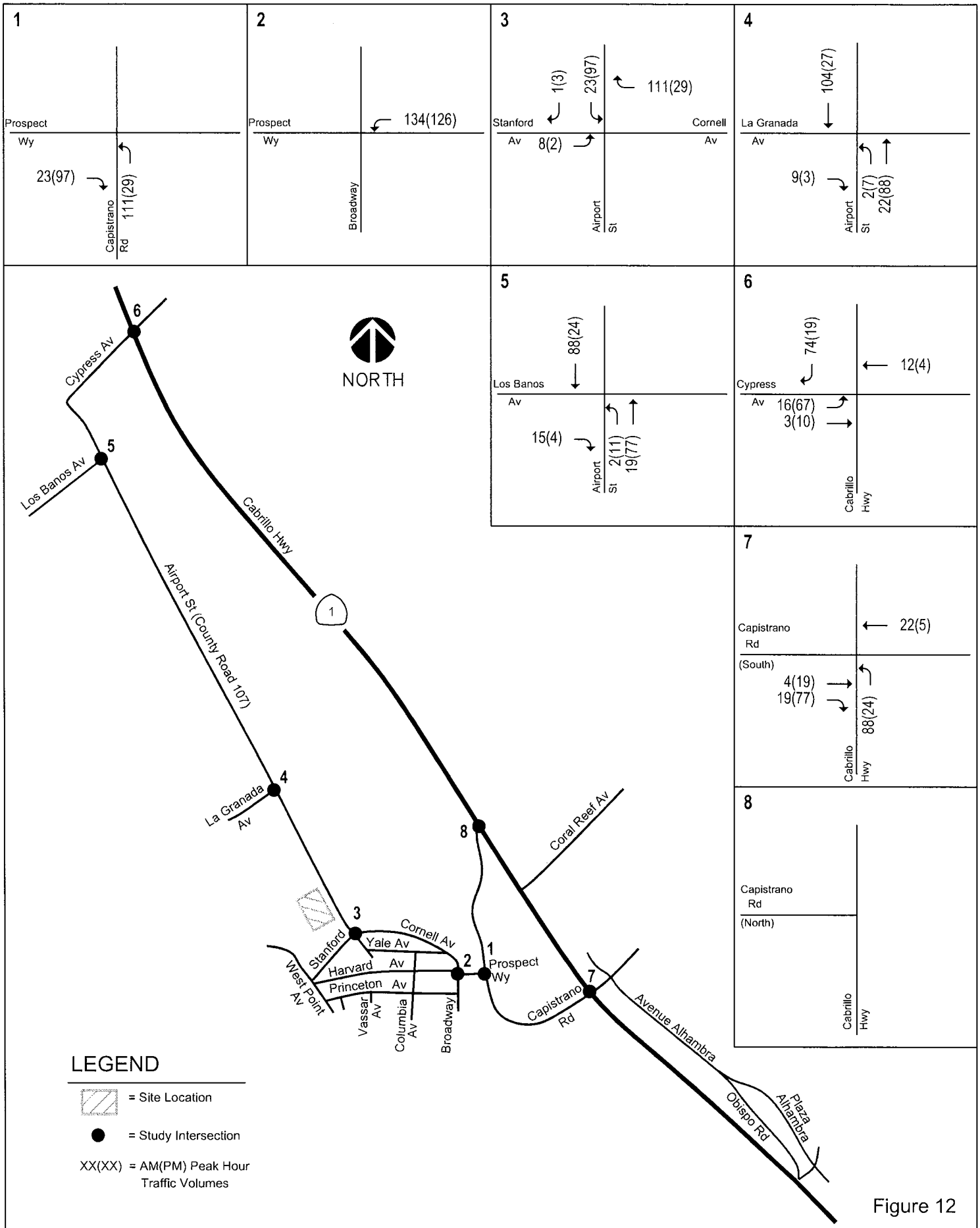


Figure 12

PROJECT TRIP ASSIGNMENT

Big Wave Office Park and Wellness Center

Hexagon Transportation Consultants, Inc.

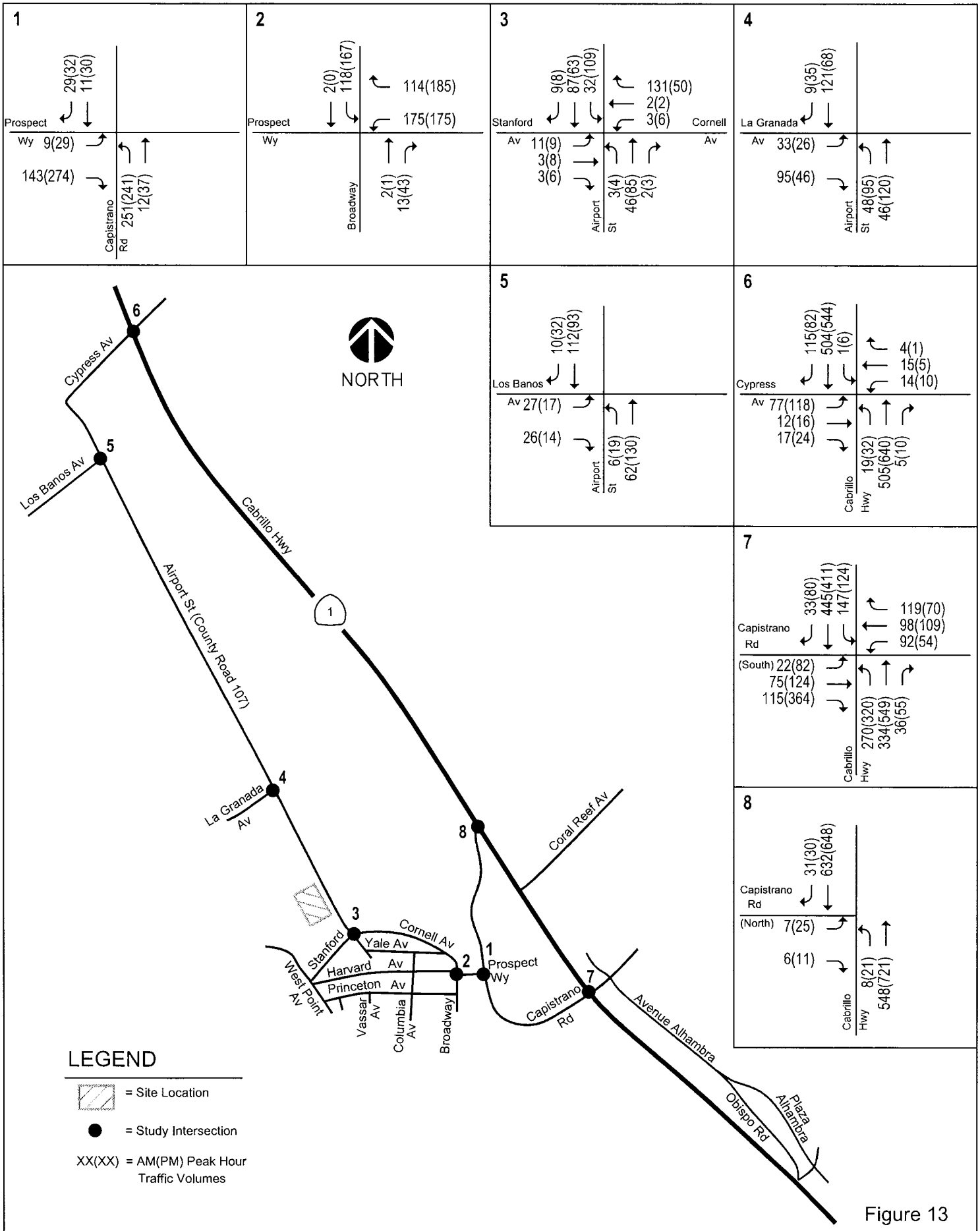


Figure 13

PROJECT TRAFFIC VOLUMES

Big Wave Office Park and Wellness Center

Hexagon Transportation Consultants, Inc.

Table 7
Project Intersection Levels of Service

# Intersection	Peak Hour	Background Average Delay	Background Average LOS	Background Worst Delay	Background Worst LOS	Project Average Delay	Project Average LOS	Project Worst Delay	Project Worst LOS
1 Prospect & Capistrano	AM	6.9	A	9.1	A	7.4	A	9.4	A
	PM	7.3	A	10.3	B	8.1	A	11.0	B
2 Broadway & Prospect	AM	8.1	A	9.6	A	10.1	A	11.8	B
	PM	8.3	A	10.3	B	10.9	A	13.8	B
3 Airport & Stanford/Cornell	AM	2.1	A	9.5	A	5.1	A	10.7	B
	PM	2.6	A	11.5	B	4.7	A	11.9	B
4 Airport & La Granada	AM	6.6	A	9.1	A	4.6	A	9.9	A
	PM	5.0	A	9.5	A	3.7	A	10.0	B
5 Airport & Los Banos	AM	3.1	A	8.9	A	2.2	A	8.9	A
	PM	1.6	A	9.2	A	1.4	A	9.7	A
6 Hwy 1 & Cypress	AM	2.1	A	22.4	C	3.1	A	28.7	D
	PM	2.0	A	26.3	D	6.9	A	59.8	F
7 Hwy 1 & Capistrano (South)*	AM	25.4	C	-	-	26.1	C	-	-
	PM	24.9	C	-	-	25.4	C	-	-
8 Hwy 1 & Capistrano (North)	AM	0.2	A	15.1	C	0.2	A	15.1	C
	PM	0.6	A	18.5	C	0.6	A	18.5	C

*Signalized Intersection

Project Signal Warrant Analysis

With the project, the peak hour signal warrant would be met at the intersection of Highway 1 at Cypress Avenue. With signalization, this intersection would operate at LOS A under the AM and PM peak hours for both project scenarios. The signal warrant analysis sheets are included in Appendix E.

Project Impacts on Bicycle and Pedestrian Facilities

It is reasonable to assume that bicycle trips will comprise no more than 5 percent of the travel mode share to the site during the peak commute periods. This would equate to 22 and 17 new bicycle trips during the AM and PM peak hours, respectively. These volumes of bicycle trips are not expected to exceed the bicycle-carrying capacity of streets surrounding the site, and the increase in bicycle trips is not expected to require new off-site bicycle facilities.

The proposed project would add a pedestrian path along the project frontage. There are currently no sidewalks provided in either of these neighborhoods. It is recommended that the applicant extend a sidewalk from the project frontage to the transit stop located on Airport Street near the La Granada Avenue intersection to facilitate and encourage transit usage by both residents and visitors.

Project Impacts on Transit Service

The transit service in the project vicinity is minimal. As mentioned in Chapter 2, this area is serviced by only one route which provides 1-2 hour headways. However, the project would not generate a need for additional transit service. Assuming a transit mode share of 5 percent, the new development would add 15 and 13 potential new transit trips during the AM and PM peak hours, respectively. It is expected that these additional riders could be accommodated by the existing transit service.

Site Access

The site review is based on the site plan dated 2008 by Macleod and Associates. The site access was evaluated in accordance with generally accepted traffic engineering standards. Access to the site would be provided by five two-way driveways on Airport Street – two driveways to access the Wellness Center (the southern portion of the project site) and three to the Office Park site (the larger portion of the project site located to the north). Two of the Office Park driveways have an island separating ingress and egress. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers exiting the site. Typically, the installation of left turn pockets would be considered for this type of new development. Analysis shows that left turn pockets are not warranted for this project for the following reasons. First, the peak hour southbound through traffic volumes are low on Airport Street at the proposed driveway locations for the project (103 AM trips and 84 PM trips). Under proposed conditions, only 119 project trips would make a left turn during the AM peak hour and 31 trips during the PM peak hour. These volumes do not warrant the installation of a left turn pocket. Second, Airport Street is not wide enough for a new lane. Finally, there are no left turn pockets on Airport Street in the project vicinity. Thus, the installation of left turn pockets is not warranted as part of this project.

On-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 drive aisles proposed are approximately 24 feet in width. This aisle dimension is satisfactory for two-way vehicle flow with 90-degree parking. There are no proposed dead-end aisles.

5.
Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with and without the project. Cumulative conditions represent conditions 20 years into the future.

Roadway Network under Cumulative Conditions

The intersection lane configurations under cumulative conditions were assumed to be the same as described under project conditions.

Cumulative Traffic Volumes

Traffic volumes under cumulative conditions were estimated by applying to the existing volumes an annual growth rate of one percent for twenty years, then adding the trips from approved developments and the project. In addition, there are two approved developments on the approved development list received from the County of San Mateo with a 'proposed' status (see Table 8). As these projects had not yet been approved at the time of this report, they are included in the cumulative scenario but not the background scenario. The 1% growth rate factor was based upon C/CAG model forecasts. The growth was based on a 20-year projection. Cumulative traffic volumes without the project trips are shown on Figure 14. Cumulative traffic volumes with project trips are shown on Figure 15.

Intersection Levels of Service under Cumulative Conditions

The results of the level of service analysis under Cumulative Conditions both with and without the Project show that all the intersections would operate at LOS C or better (see Table 9). As mentioned previously,

Table 8
Approved Developments-Cumulative Scenario

Land Use	Size	Location
Commercial	17,147 s.f.	264, 268, 272, 276 & 280 Princeton Ave.
Mixed-Use	1,622 s.f.	Princeton Ave. at Broadway

Source: San Mateo County Planning & Building Division
Trip generation rates from ITE Trip Generation Manual, 7th and 8th Editions.

Hexagon performed travel time runs using two different routes to determine the trip distribution patterns for vehicles traveling from the project site to northbound Highway 1.

The first route included northbound Airport Street and eastbound Cypress Avenue to northbound Highway 1. The second route included southbound Airport Street to eastbound Cornell Avenue to eastbound Prospect Way to northbound Capistrano Road to northbound Highway 1. The travel time runs showed that the northbound Airport Street route took half the time of the southbound Airport Street route (two minutes as opposed to four minutes). As a result, Hexagon assumed that vehicular traffic traveling from the project site to northbound Highway 1 would proceed north on Airport Street to Cypress Avenue and turn left onto Highway 1.

Under cumulative with no project PM peak hour conditions there would be a 46.0 second delay for the worst movement (eastbound left) of the Cypress Avenue at Highway 1 intersection. This delay would continue to increase under the project condition scenario. The worst-case delay for this movement would be 131.7 seconds more than without the project during the PM peak hour. As a result, some of the project trips might take the southbound Airport Street route to equalize this delay. However, Hexagon found that even if 25 percent of the project traffic took the southbound route as opposed to the northbound route, the delay at the intersection would continue to operate at LOS F for the left turn from Cypress Avenue onto Highway 1 and the signal warrant would be met. The level of service calculation sheets are included in Appendix B.

Cumulative Signal Warrant Analysis

The peak-hour signal warrant (*MUTCD 2003*, Urban Warrant) was checked for the seven currently unsignalized intersections to determine whether signalization would be justified on the basis of cumulative peak-hour volumes. The analysis showed that the study intersection of Highway 1 at Cypress Avenue would meet the peak hour signal warrant under cumulative conditions both with and without the project. The signal warrant analysis sheets are included in Appendix E.

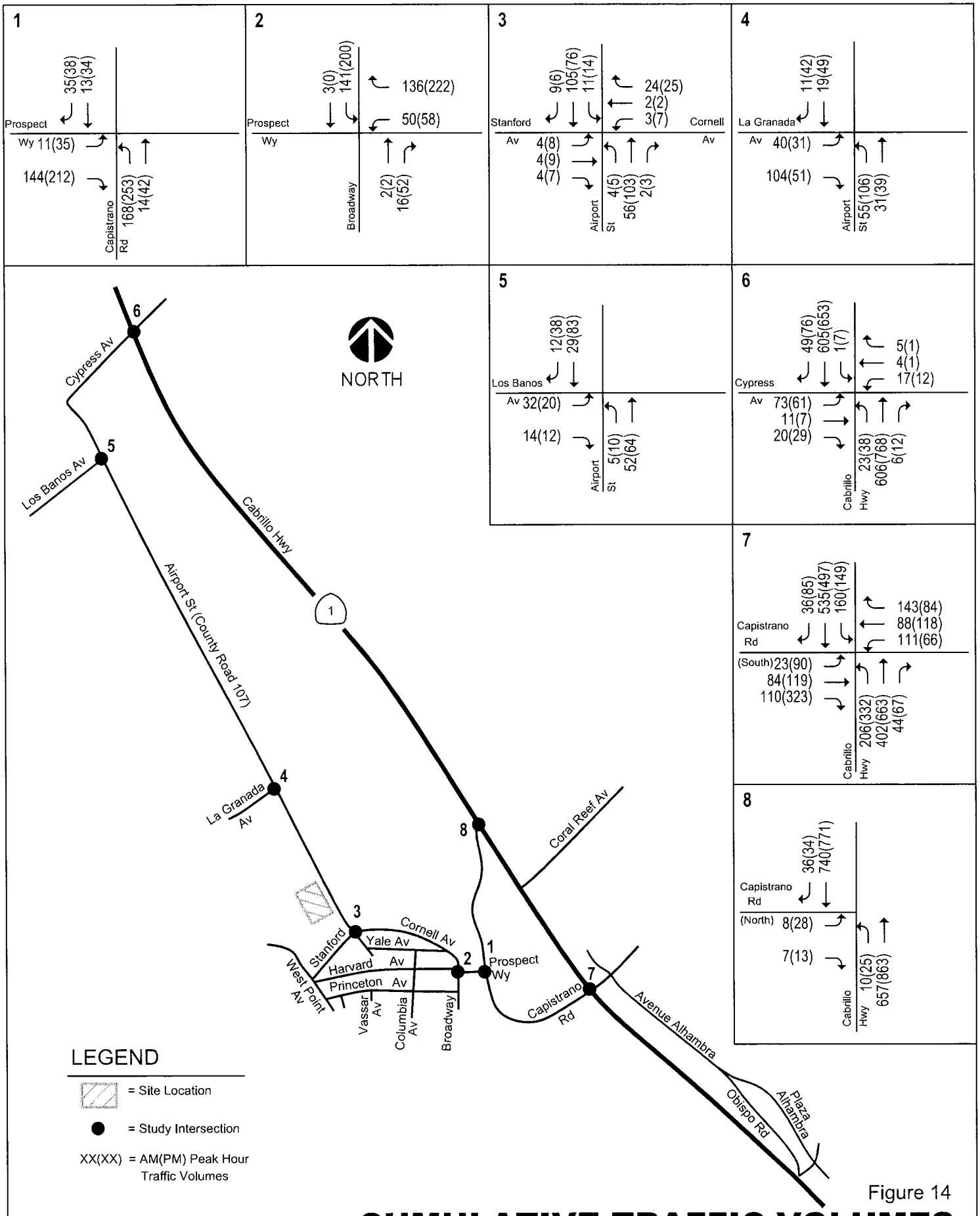


Figure 14

CUMULATIVE TRAFFIC VOLUMES WITHOUT PROJECT

Big Wave Office Park and Wellness Center

Hexagon
Transportation Consultants, Inc.

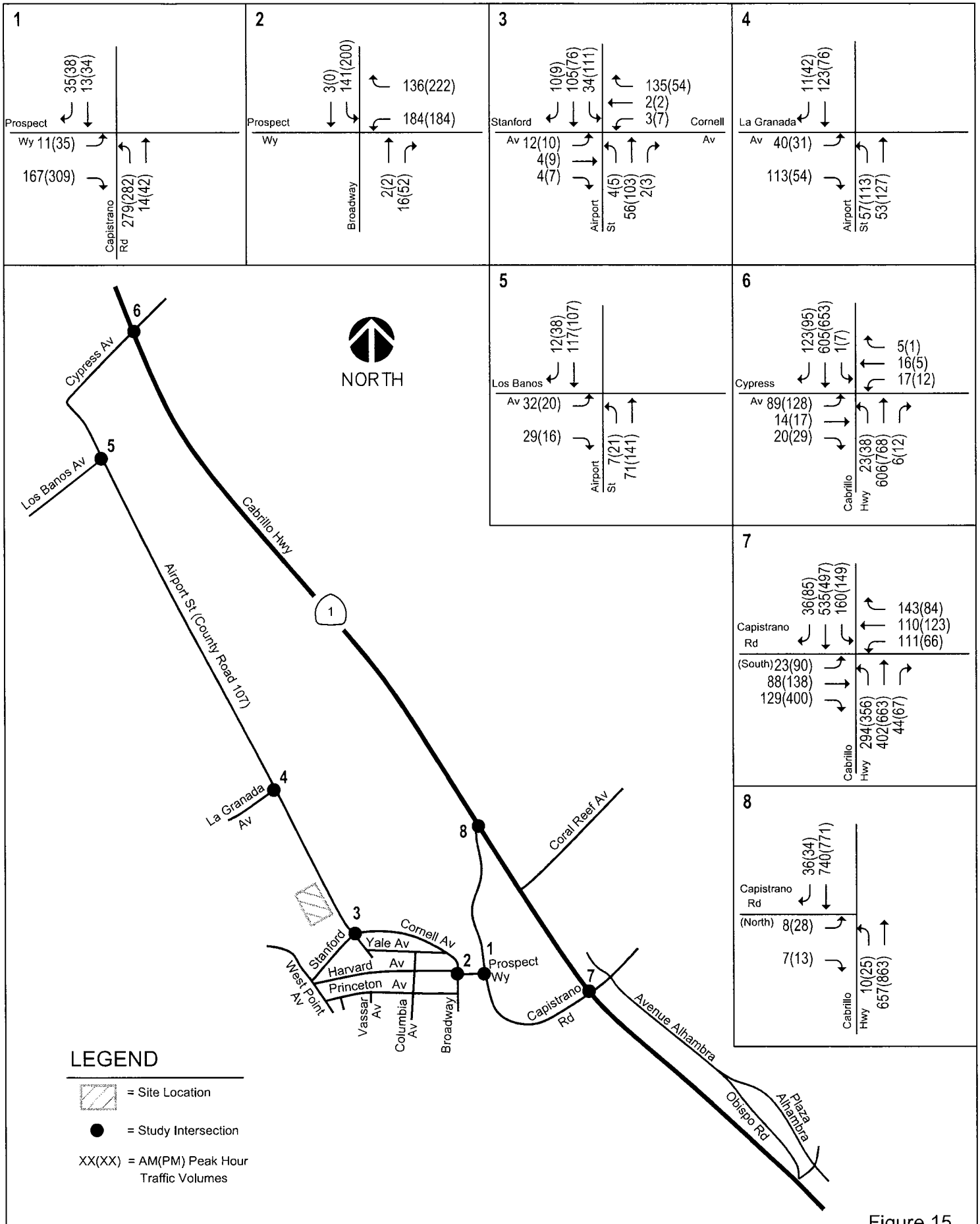


Figure 15

CUMULATIVE TRAFFIC VOLUMES

Big Wave Office Park and Wellness Center

Hexagon Transportation Consultants, Inc.

Table 9
Cumulative Intersection Levels of Service

# Intersection	Peak Hour	Cumulative w/o Project				Cumulative w/ Project			
		Average		Worst		Average		Worst	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1 Prospect & Capistrano	AM	7.1	A	9.3	A	7.5	A	9.6	A
	PM	7.7	A	11.1	B	8.5	A	11.9	B
2 Broadway & Prospect	AM	8.3	A	9.9	A	10.7	A	12.8	B
	PM	8.6	A	11.0	B	12.1	A	16.0	C
3 Airport & Stanford/Cornell	AM	2.1	A	9.7	A	4.8	A	11.0	B
	PM	2.7	A	10.0	A	4.6	A	11.9	B
4 Airport & La Granada	AM	6.7	A	9.3	A	5.0	A	10.2	B
	PM	5.1	A	9.9	A	4.0	A	10.4	B
5 Airport & Los Banos	AM	3.1	A	9.0	A	2.4	A	9.6	A
	PM	1.7	A	9.4	A	1.5	A	9.9	A
6 Hwy 1 & Cypress	AM	3.1	A	34.6	D	5.1	A	52.7	F
	PM	3.2	A	46.0	E	18.2	C	177.7	F
7 Hwy 1 & Capistrano (South)*	AM	26.0	C	-	-	26.9	C	-	-
	PM	25.5	C	-	-	26.3	C	-	-
8 Hwy 1 & Capistrano (North)	AM	0.2	A	17.3	C	0.2	A	17.3	C
	PM	0.7	A	23.2	C	0.7	A	23.2	C

*Signalized Intersection

6. Conclusions

This report presents the results of the traffic impact analysis conducted for the Big Wave Office Park and Wellness Center. The project site is located on Airport Street, north of the Princeton/Pillar Point Harbor area in unincorporated San Mateo County. The project includes a Wellness Center with the following components:

- 43 one-bedroom units for developmentally disabled adults
- 7 two-bedroom units for developmentally disabled adults
- 5 breezeway units with 4 bedrooms each which can house up to 20 residents/staff aides
- 20,000 s.f. of storage space
- 5,326 s.f. of community center (Pool/Fitness Center)

In addition to the Wellness Center, the proposed project would include 90,000 s.f. of general office, 56,250 s.f. of research and development, 33,750 s.f. of storage and 45,000 s.f. of light manufacturing. The project would have five full-access driveways on Airport Street. Parking for the project would be provided on site. Currently the site is vacant.

The potential impacts of the project were evaluated in accordance with the standards set forth by the County of San Mateo. The study included an analysis of AM and PM peak-hour traffic conditions at one signalized intersection and seven unsignalized intersections.

Project Trip Generation

Application of ITE standard trip generation rates to the proposed development shows that the project is estimated to generate 2,123 daily trips, including 292 trips (243 inbound and 49 outbound) during the AM peak hour, and 268 trips (63 inbound and 206 outbound) during the PM peak hour.

Recommended Improvements

The following measure is recommended in conjunction with the proposed project:

Highway 1 at Cypress Avenue. Based on project and cumulative with and without project conditions, the peak hour signal warrant is met at the intersection of Highway 1 at Cypress Avenue. With this improvement, the Highway 1/Cypress Avenue intersection would operate at LOS A during both the AM and PM peak hours. Under signalized conditions, the existing roadway geometry would be adequate to handle the anticipated traffic demand. It is recommended that following project occupancy, the applicant fund a yearly monitoring system at this intersection which would entail a traffic count and level of service analysis as well as a signal warrant analysis to determine if/when signalization is warranted.

Site Access and Circulation

The site review is based on the site plan dated 2008 by Macleod and Associates. The site access was evaluated in accordance with generally accepted traffic engineering standards. Access to the site would be provided by five two-way driveways on Airport Street – two driveways to access the Wellness Center (the southern portion of the project site) and three to the Office Park site (the larger portion of the project site located to the north). Two of the Office Park driveways have an island separating ingress and egress. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers exiting the site.

On-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 drive aisles proposed are approximately 24 feet in width. This aisle dimension is satisfactory for two-way vehicle flow with 90-degree parking. There are no proposed dead-end aisles.

Addition to Appendix H of the DEIR:

A) Hydrologic Calculations

Big Wave Wellness Center
Storm Water Design Flow Calculations, 2/9/10 SH

Watershed	Description	Area (sq ft)	S	C	Runoff Distance	Tc (min)	10 year (in/hr)	100 year (in/hr)	10 year Q (cfs)	100 year Q (cfs)	Storage (cf) C.3 Required	Storage (cf) 10 year Q Req	C.3 Drain Rock (35% void: cy	10 year Rock (35% void: cy	C.3 C.3 (hr) (Perm 0.6 in/hr)	10 y draw dwn (hr) (Perm 0.6 in/hr)
Wellness Center:																
Wetlands	Forested Wetlands w/ depression storage and roughness	125,000	0.015	0.1	120	11.6	2.0	3.0	0.6	0.9	2083	20833				
Organic Garden	No till cross furrows	45,000	0.015	0.1	220	12.5	1.9	2.9	0.2	0.3	750	7125				
Permeable Pavers (with storage and draw down)	Concrete Pavers with #8 space annually vacuumed	25,000	0.015	0.15	320	13.3	1.8	2.8	0.2	0.2	417	3750				
Roof Area (with storage and draw down)	Underdrain system under parking lot	35,000	0.015	0.15	320	13.3	1.8	2.8	0.2	0.3	583	5250				
	Composite Runoff Coeficient and Parking lot Storage			0.113							1750	16125	185	1706	1.4	12.9
Total: New Development	Flow and Drain Rock Depth (inches)	230,000							1.2	1.8			2	22		
Total: Existing Farm	Tilled and sloped for winter drainage	230,000	0.015	0.3	200	12.3	1.9	2.9	3.0	4.6						
Office Park:																
Wetlands	Forested Wetlands w/depression storage and roughness	226,000	0.015	0.1	120	11.6	2.0	3.0	1.0	1.6	3767	37667				
Permeable Pavers (with storage and draw down)	Concrete Pavers with #8 space annually vacuumed	315,000	0.015	0.15	400	14.0	1.5	2.6	1.6	2.8	5250	39375				
Roof Area (with storage and draw down)	Underdrain system under parking lot	80,000	0.015	0.15	350	13.6	1.7	2.7	0.5	0.8	1333	11333				
	Composit Runoff Coeficient and Parking Lot Storage			0.132							10350	88375	1095	9352	0.7	5.6
Total: New Development									3.2	5.2			1	10		
Total: Existing Farm	Tilled and sloped for winter drainage	621,000	0.015	0.3	320	13.3	1.8	2.8	7.8	12.1						

Notes:

1. Existing Farming plowed in Winter for Drainage, Impermeable Clay. Proposed development, infiltration parking lot with roof draining into parking lot, forested wetlands, organic farming
2. Runoff Flow Rate for South Parcel, Farmed: 3.0 cfs for 10 year storm and 4.6 cfs for 100 year storm
3. Runoff Flow Rate for Wellness Center on South Parcel as Proposed: 1.2 cfs for 10 year storm and 1.8 cfs for 100 year Storm.
4. Wellness Center Flow Reduction: (10 year storm) 60% reduction, (100 year storm) 61% reduction
5. Runoff Rate for North Parcel, farmed: 7.8 cfs for 10 year and 12. 1 for 100 year storm
6. Runoff Rate for Office Park on North Parcel: 3.2 cfs for 10 year and 5.2 for 100 year
7. Office Park Flow Reduction: (10 year storm) 59% Reduction, (100 year storm) 57% reduction
8. To store the C.3 required flow in the gravel below the parking lot only 1 to 2 inches of gravel is needed.
9. To store the 10 year flow 12 inches of gravel in needed under the office park parking lot and 22 inches in needed in the wellness center site.
10. Since surface flow is needed in the Wellness Center, 12 inches of gravel (6 times more than the c.3 requirement) will be provided in the Wellness Center Parking lot
11. With a low permiabliltiy soil (.6 inches/hour) it takes 1.5 hours to drain the C.3 storm and 12 hours to drain the 10 yr storm for the Wellness Center.
13. To drain the Office Park parking lot takes 1 hour for c.3 storage and 6 hours for a 10 year storm.
14. The parking lots will be designed to store and drain the 10 year storm.

Addition to Appendix H of the DEIR:

B) The 2005 FEMA Letter of Map Amendment Determination Document

Federal Emergency Management Agency

Washington, D.C. 20472

November 1, 2005

MR. JOHN C. BERRY
BERRY & ASSOCIATES CIVIL ENGINEER
1733 WOODSIDE ROAD, SUITE 335
REDWOOD CITY, CA 94061

CASE NO.: 06-09-0050A
COMMUNITY: SAN MATEO COUNTY, CALIFORNIA
(UNINCORPORATED AREAS)
COMMUNITY NO.: 060311

DEAR MR. BERRY:

This is in reference to a request that the Federal Emergency Management Agency (FEMA) determine if the property described in the enclosed document is located within an identified Special Flood Hazard Area, the area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood), on the effective National Flood Insurance Program (NFIP) map. Using the information submitted and the effective NFIP map, our determination is shown on the attached Letter of Map Amendment (LOMA) Determination Document. This determination document provides additional information regarding the effective NFIP map, the legal description of the property and our determination.

Additional documents are enclosed which provide information regarding the subject property and LOMAs. Please see the List of Enclosures below to determine which documents are enclosed. Other attachments specific to this request may be included as referenced in the Determination/Comment document. If you have any questions about this letter or any of the enclosures, please contact the FEMA Map Assistance Center toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, 3601 Eisenhower Avenue, Suite 130, Alexandria, VA 22304-6439.

Sincerely,

Doug Bellomo, P.E., Chief
Hazard Identification Section, Mitigation Division
Emergency Preparedness and Response Directorate

LIST OF ENCLOSURES:
LOMA DETERMINATION DOCUMENT (REMOVAL)

cc: State/Commonwealth NFIP Coordinator
Community Map Repository
Region

COUNTY OF SAN MATEO
Department of Public Works

INTER-DEPARTMENTAL CORRESPONDENCE

Date: July 22, 2005

TO: William Cameron, Building Inspection Manager

FROM: Neil R. Cullen, Director of Public Works

SUBJECT: **FEMA Map LOMA**

My staff has been in discussion with Mr. John Berry concerning his request, on behalf of his client, to have his FIRM map amendment request for parcels APN 047-311-060 and 047-312-040 "acknowledged" by San Mateo County and forwarded to FEMA's offices in Alexandria, Virginia for consideration.

Staff has found that there is insufficient data available to confirm or dispute the map amendment request. However, I believe that Mr. Berry's request that the final line in Section B of the Community Acknowledgement Form be stricken and initialed and that the document be forwarded to FEMA for consideration is reasonable, as I believe that this is the reference on the form that makes a judgment concerning the validity of the map amendment request.

I am forwarding Mr. Berry's application to you and have tagged the Community Acknowledgement to which I refer. I have also stricken and initialed the final line in Section B on an extra copy, as noted above.

Should you have any questions concerning this matter, you may contact Joe LoCoco of my staff at extension 1454. Please advise Mr. Berry if you concur with my recommendation and if you will be executing and forwarding his application.

F:\USERS\JOEL\WORD\MISC\Firmamendmentrqstjuly2005memotobuilding.DOC

Berry & Associates
1733 Woodside Road, Ste 335
Redwood City, CA 94061
Phone 650 368-0750 *Fax 650 368-1810

November 9, 2004

MEMORANDUM:

SUBJECT: Airport Street, El Granada Job # 2364
Flood Plain Issues (Flood Zone A)
APN 047-311-061

TO: Gary Fitzer
San Mateo County

FROM: John C. Berry

Gary, as previously discussed, we have superimposed the flood plain limits from the FEMA Flood Insurance Rate Map onto an area-wide Topo Map (USGS-NDVG DATUM) which includes APN 047-311-061. (Copy attached) there is little or no correlation between the flood limit and the shape of the contours in this area.

I have followed the FEMA Guide for determining BFE's in Zone A areas, however, in a "coastal" area the guide suggests that flood elevations be obtained from local agency records, if possible.

Given that the perimeter elevations for the superimposed flood area vary from 9.7 to 55.0, it is reasonable to suggest that a letter of map revision (LOMA) is appropriate.

I have attempted to apply the "CHAMPS" Program from the FEMA, Zone A Program for coastal lands; however, a "back-bay" situation (for APN 047-311-061) does not lend itself to these computations.

My only option is to consult flooding records in the Princeton Area and if possible, derive a reasonable 100-year base flood elevation from this data.

Based on my conversation with Henry Chau at FEMA in Oakland, the next step would be for me and an agent of San Mateo County to contact him with a suggested BFE along with proposed map revisions to obtain preliminary concurrence before the application is submitted to revise the FIRM.

Thank you,

John C. Berry, RCE 18720

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP AMENDMENT
DETERMINATION DOCUMENT (REMOVAL)

COMMUNITY AND MAP PANEL INFORMATION		LEGAL PROPERTY DESCRIPTION
COMMUNITY	SAN MATEO COUNTY, CALIFORNIA (Unincorporated Areas)	A parcel of land in San Mateo County, as described in the Grant Deed recorded as Document No. 2002-214504; A parcel of land in San Mateo County, as described in the Individual Grant Deed recorded as Document No. 2000-083107, all in the Office of the Recorder, San Mateo County, California (APN 047-311-060 and 047-312-040)
	COMMUNITY NO.: 060311	
AFFECTED MAP PANEL	NUMBER: 0603110113B	
	NAME: SAN MATEO COUNTY, CALIFORNIA (UNINCORPORATED AREAS)	
	DATE: 7/5/1984	
FLOODING SOURCE: HALF MOON BAY		APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 37.504, -122.496 SOURCE OF LAT & LONG: PRECISION MAPPING STREETS 7.0 DATUM: NAD 83

DETERMINATION

LOT	BLOCK/ SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NGVD 29)	LOWEST ADJACENT GRADE ELEVATION (NGVD 29)	LOWEST LOT ELEVATION (NGVD 29)
—	—	—	Airport Street	Property	C	8.5 feet	—	9.5 feet

Special Flood Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).

ADDITIONAL CONSIDERATIONS (Please refer to the appropriate section on Attachment 1 for the additional considerations listed below.)

ZONE A

This document provides the Federal Emergency Management Agency's determination regarding a request for a Letter of Map Amendment for the property described above. Using the information submitted and the effective National Flood Insurance Program (NFIP) map, we have determined that the property(ies) is/are not located in the SFHA, an area inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood). This document amends the effective NFIP map to remove the subject property from the SFHA located on the effective NFIP map; therefore, the Federal mandatory flood insurance requirement does not apply. However, the lender has the option to continue the flood insurance requirement to protect its financial risk on the loan. A Preferred Risk Policy (PRP) is available for buildings located outside the SFHA. Information about the PRP and how one can apply is enclosed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, 3601 Eisenhower Avenue, Suite 130, Alexandria, VA 22304-6439.

Doug Bellomo, P.E., Chief
Hazard Identification Section, Mitigation Division
Emergency Preparedness and Response Directorate

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP AMENDMENT
DETERMINATION DOCUMENT (REMOVAL)
ATTACHMENT 1 (ADDITIONAL CONSIDERATIONS)

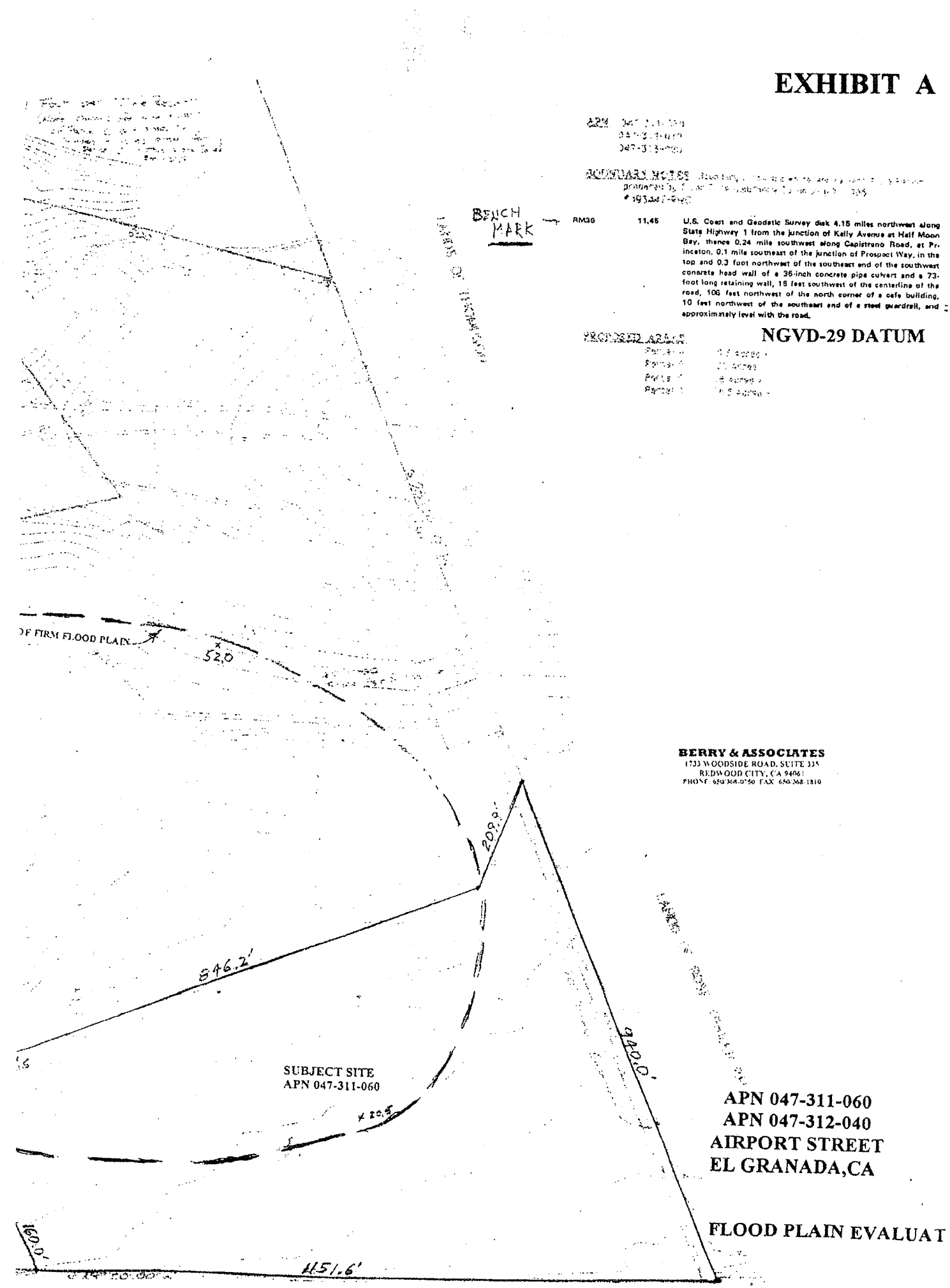
ZONE A (This Additional Consideration applies to the preceding 1 Property.)

The National Flood Insurance Program map affecting this property depicts a Special Flood Hazard Area that was determined using the best flood hazard data available to FEMA, but without performing a detailed engineering analysis. The flood elevation used to make this determination is based on approximate methods and has not been formalized through the standard process for establishing base flood elevations published in the Flood Insurance Study. This flood elevation is subject to change.

This attachment provides additional information regarding this request. If you have any questions about this attachment, please contact the FEMA Map Assistance Center toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, 3601 Eisenhower Avenue, Suite 130, Alexandria, VA 22304-6439.

Doug Bellomo, P.E., Chief
Hazard Identification Section, Mitigation Division
Emergency Preparedness and Response Directorate

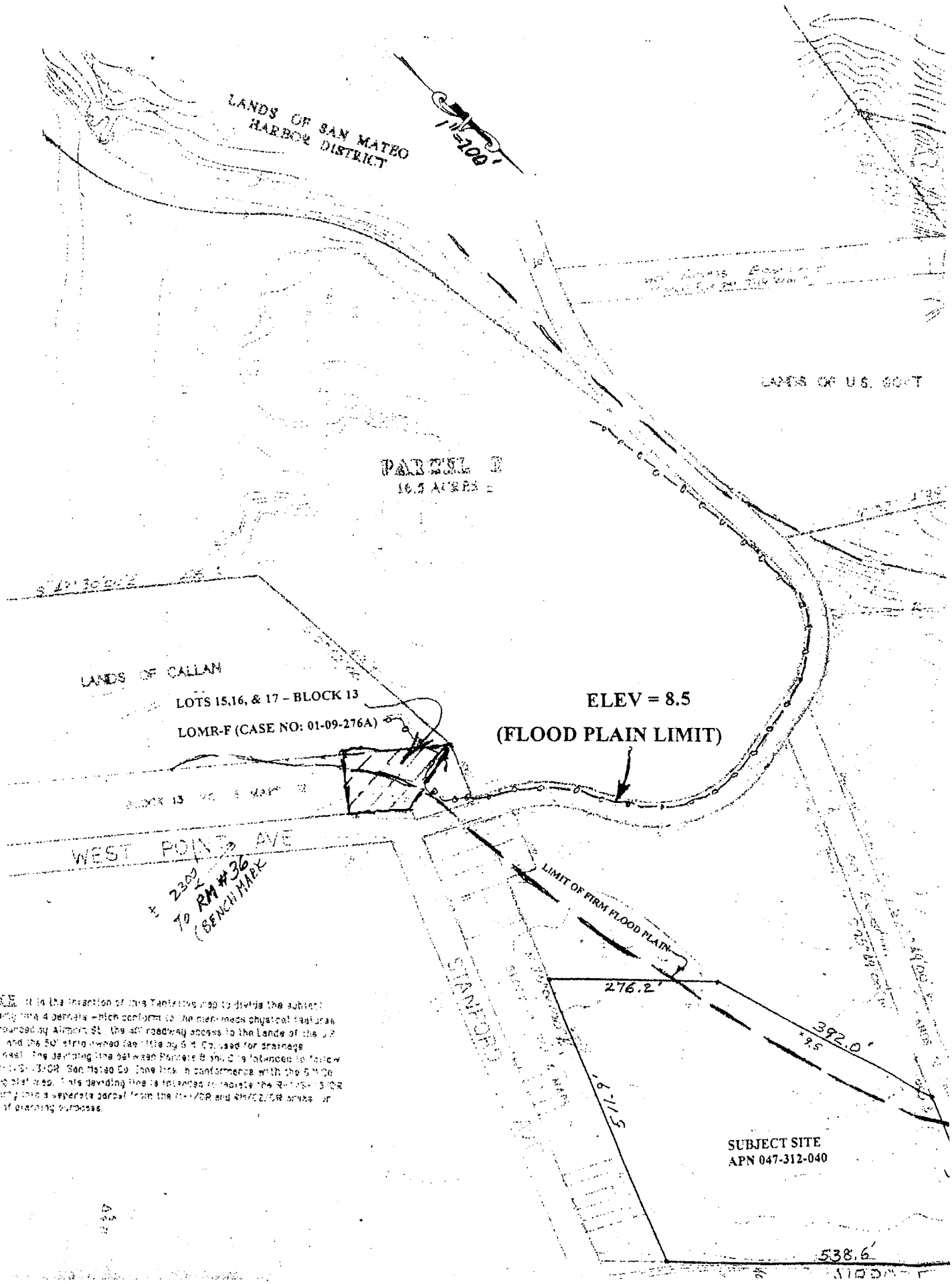
EXHIBIT A



BERRY & ASSOCIATES
1733 WOODSIDE ROAD, SUITE 335
REDWOOD CITY, CA 94061
PHONE: 650/368-0750 FAX: 650/368-1810

APN 047-311-060
APN 047-312-040
AIRPORT STREET
EL GRANADA,CA

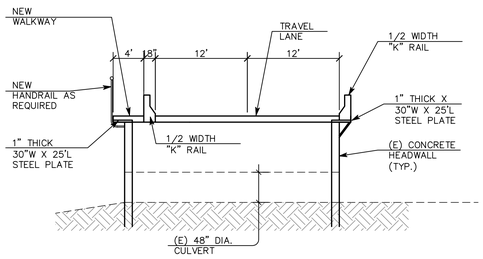
FLOOD PLAIN EVALUAT



NOTE: It is the intention of this Tentative map to divide the subject property into 4 parcels which conform to the man-made physical features surrounded by Airport St. the old roadway access to the Lands of the U.S. Govt. and the 50' strip owned (ac-title by S.M. Co.) used for drainage purposes. The dividing line between Parcels B and C is intended to follow the R/W of S.M.C. San Mateo Co. Flood Dist. in conformance with the S.M.Co. Zoning Plat Map. This dividing line is intended to create the Parcel C/R property into a separate parcel from the R-1/CR and R-1/C2/CR areas for ease of financing purposes.

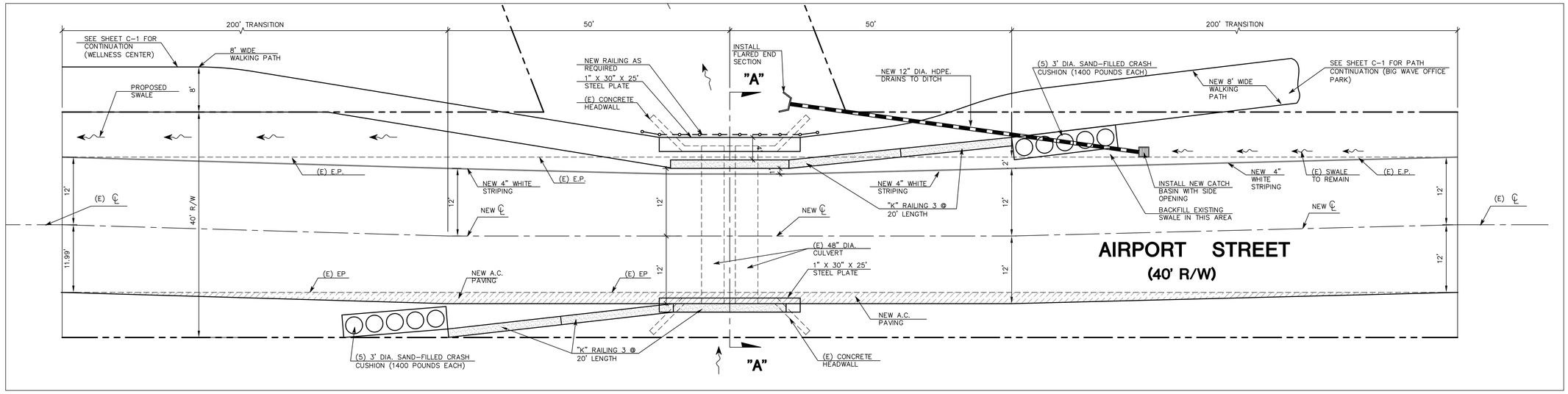
Addition to Appendix H of the DEIR:

C) Concrete Grid Pavers-Fireline, Driveway and Intermittent Parking



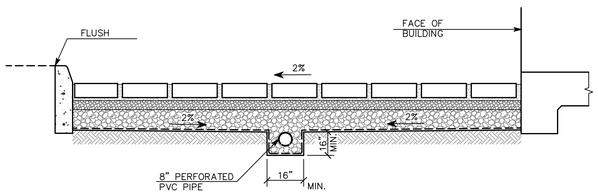
SECTION A-A

NO SCALE



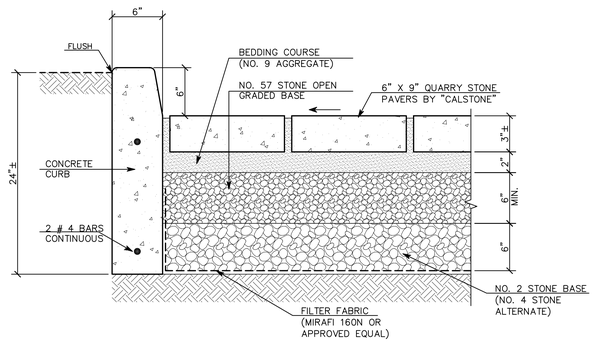
A ENLARGE AREA

NO SCALE



B TYPICAL SECTION

SCALE: NOT TO SCALE



C CURB AND PAVEMENT DETAIL

SCALE: NOT TO SCALE

NO.	DESCRIPTION	BY:	DATE:

REGISTERED PROFESSIONAL ENGINEER DANIEL G. MCCLOSKEY No. 35048 CIVIL STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

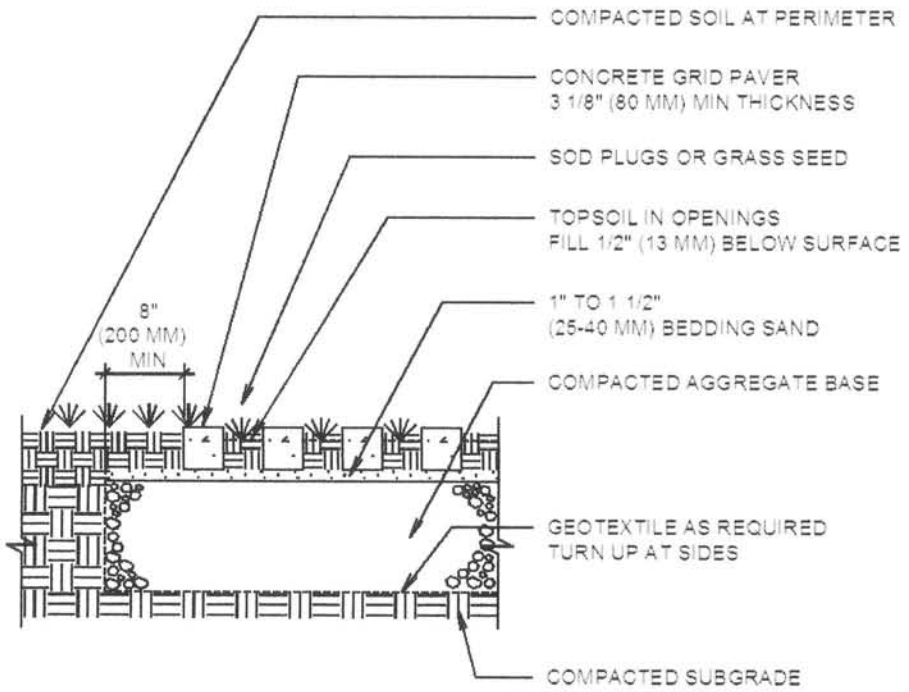
PREPARED FOR:
BIG WAVE LLC

DETAIL SHEET

BIG WAVE OFFICE PARK
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA

PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	NONE
DATE:	05/17/10
DRAWING NO.	1608-00
SHEET	C-4



NOTES:

1. BASE THICKNESS VARIES WITH TRAFFIC, CLIMATE, AND SUBGRADE.
2. MINIMUM BASE THICKNESS: 6" (150 MM) RESIDENTIAL DRIVEWAYS, 8" FIRELANES & PARKING LOTS.

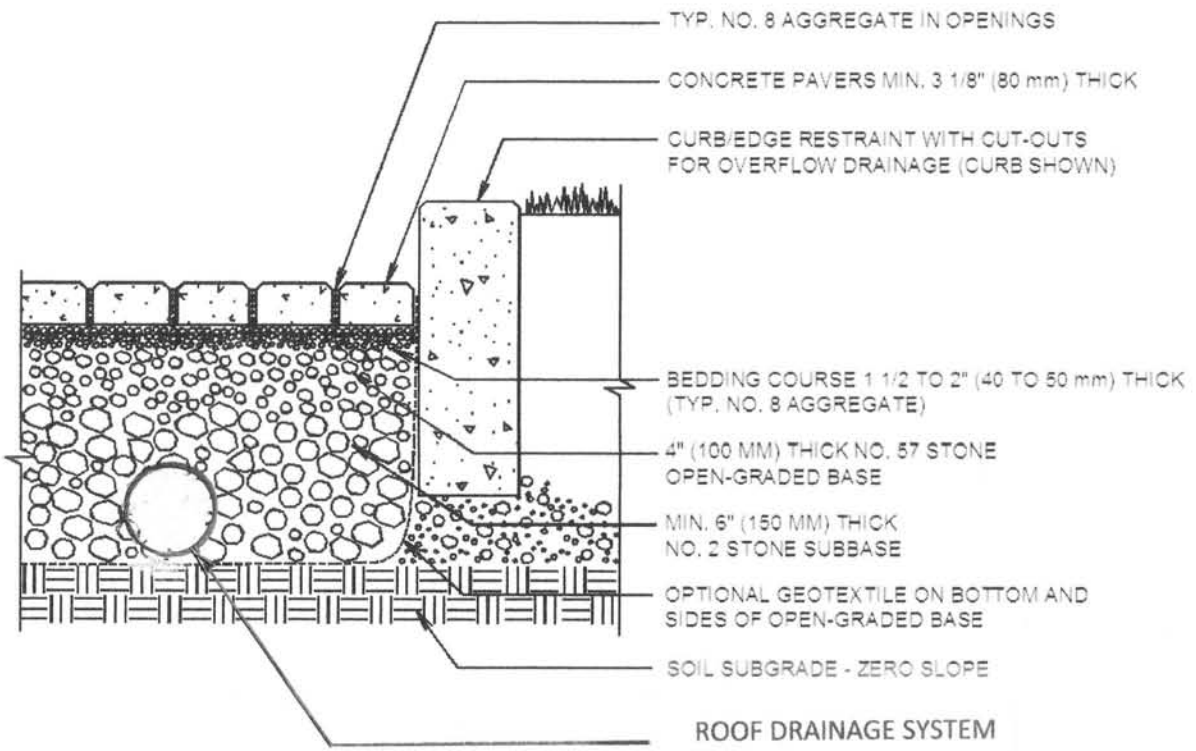
CONCRETE GRID PAVERS-FIRELANE, DRIVEWAY & INTERMITTENT PARKING

DRAWING NO: ICPI-08

SCALE: F.S.

Addition to Appendix H of the DEIR:

D) Permeable Pavement with Full Exfiltration to Soil Subgrade.



NOTES:

1. 2 3/8" (60 MM) THICK PAVERS MAY BE USED IN PEDESTRIAN APPLICATIONS.
2. NO. 2 STONE SUBBASE THICKNESS VARIES WITH DESIGN, CONSULT ICPI PERMEABLE INTERLOCKING CONCRETE PAVEMENT MANUAL.

PERMEABLE PAVEMENT WITH FULL EXFILTRATION TO SOIL SUBGRADE

DRAWING NO.	ICPI-68
SCALE	NO SCALE

Addition to Appendix I of the DEIR:

"Noise Measurement" email from Dan Hooper to Jennie Anderson (CAJA), dated June 5, 2009.

From: "Jennie Anderson" <jennie.anderson@cajaeir.com>
To: CLeung@co.sanmateo.ca.us
CC: dan.hooper@cajaeir.com; geoff.reilly@cajaeir.com
Date: 6/5/2009 1:56 PM
Subject: FW: Fwd: Noise Measurements
Attachments: noise monitoring locations.pdf; HMB Airport noise contours.pdf; RE: Background Noise Study

Hi Camille,

Based on the comments outlined in this email chain, as well as our phone discussion, here are some updates/thoughts from our Noise Specialist regarding noise measurements for the project. Please let me know if you have comments.

Best regards,

Jennie Anderson
Project Manager
Christopher A. Joseph & Associates
Direct: (707) 676-1902

-----Original Message-----
From: Dan Hooper
Sent: Friday, June 05, 2009 12:30 PM
To: Jennie Anderson
Subject: RE: Fwd: Noise Measurements

Jennie,

Thanks for forwarding me the information below. I wanted to lay out for you what I did at the site as well as address everyone's suggestions/concerns below.

I went to the Big Wave site on Tuesday, between the hours of 11:30 am and 2:30 pm. It is typical to go take noise measurements at a site Tuesday through Thursday, during non-rush hour times. This is because traffic patterns on Monday, Friday, and the weekends can vary significantly and are not representative of typical traffic. Rush hour measurements are also typically avoided as cars going slower usually produce less noise.

The weather at the Site on Tuesday was sunny with clear skies. During noise studies it is best to avoid taking measurements in the rain, when it is overcast, or foggy. I took noise measurements at 5 locations, as shown on the attached file (noise monitoring locations). The majority of the existing noise sources would come from the airport and the existing commercial buildings, therefore I made sure to take 3 measurements along Airport Road. Also, I took two measurements in the existing mobile home neighborhood to establish a baseline in order to see how much construction and operation of the project would affect current levels.

I understand that it was suggested that we monitor on a Saturday to capture noise from airplanes landing and taking off from the airport. I do not feel it is necessary for the following reasons:

1). The traffic noise will not be representative on a Saturday, which is a big noise contributor

2). Since the air traffic at HMB is not consistent, there is no guarantee that there would be significantly more planes on a Saturday and that they would be flying overhead during the noise monitoring times.

3). While I was taking the noise measurements (15 minute intervals) on Tuesday, I noted how many planes were overhead. For example, at two of the three noise locations along Airport Road, approximately 2-3 airplanes flew overhead during the 15 minute recording period. This resulted in a noise level of 65 dBA. These levels are consistent with the noise contours outlined in the HMB Airport land use plan (attached). Moreover, at the third location with no airplanes flying overhead, the noise level was approximately 61 dBA. This shows that the noise contributed by airplanes was captured in the noise monitoring.

4). It is also not necessary to conduct noise monitoring at both air strips, as we are only concerned with noise at the project site, not at the airport.

Please let me know if you have any questions or require any further clarification. Thanks

Dan

Dan Hooper, P.E.
Senior Environmental Scientist
Dan.Hooper@cajaeir.com
Christopher A. Joseph & Associates
Environmental Planning and Research
www.cajaeir.com

Oakland Office
610 16th Street, Suite 514
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Phone (main): (510) 452-5200
Phone (direct): (510) 550-3733
Fax: (510) 452-5202
Mobile: (415) 205-8985

Los Angeles * Santa Clarita * Agoura Hills * Petaluma * Oakland * Mammoth Lakes

Source: San Mateo County GIS, CAJA 2007

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

0 250 500 750 1000
Feet

Figure III-1
Regional Vicinity Map

Noise contour lines are usually generated by using the FAA's Integrated Noise Model (INM), a computer program that simulates actual aircraft noise measurements. However, other computer modeling techniques can be used. Noise contour maps identify existing and projected areas that are and will be affected by aircraft noise as defined by the contours. The noise contours shown on the maps do not represent absolute noise levels. Variations in flight activity and locational characteristics (e.g. microclimate, vegetation, buildings, etc.) can extend or reduce the noise affected areas.

The noise metric used in defining aircraft noise contours in California is the Community Noise Equivalent Level metric, referred to as CNEL. The CNEL value represents a 24-hr. weighted annual average noise level. It is a measure of the overall noise experienced during an entire day. The time-weighting accounts for the fact that the noise levels that occur during certain sensitive time periods are penalized for occurring at these times. In the CNEL scale, those aircraft noise events that take place during the evening hours (7 p.m. to 10 p.m.) are penalized by an additional 5 decibels (dB) and those events that occur during the nighttime hours (10 p.m. to 7 a.m.) are penalized additional 10 dB. These penalties were selected by the State of California to attempt to account for increased human sensitivity to noise during the quieter periods of the day, where home activities and sleeping are the most probable activities.

b. Half Moon Bay Airport 1995 Projected Aircraft Noise Contours

The Half Moon Bay Airport noise contours contained in this Plan were developed in 1975 and are computer-projections for 1995. The projected noise contours include the 55 dB CNEL, 60 dB CNEL, and 65 dB CNEL noise contours. The 1975 computer projections included the following assumptions:

* An Instrument Landing System (ILS) will have been installed on Runway 30.

* There would be no changes in the runway configuration.

* Planned annual operations - 240,000 (PANCAP).

* Daily operations, peak day - 1,060.

* Mix of aircraft - 10 jets, 40 twin engine piston, remainder are single engine.

* Daily operations data: 7 a.m. to 7 p.m. - 88 percent; 7 p.m. to 10 p.m. - 9 percent; after 10 p.m. - 3 percent.

* Runway 30 usage - 85 percent; Runway 12 - 15 percent.

* Large aircraft make left turnout.

* "Racetrack pattern" indicates light aircraft traffic in local pattern operations.

Source: San Mateo County Airports Plan, July 1975; Page 123.

The projected 1995 aircraft noise contours for Half Moon Bay Airport are shown on Map HMB-7 on page III.-18.

5. Airport Noise/Land Use Compatibility Criteria For Half Moon Bay Airport

Considerable study has been done by medical researchers regarding the effects of noise on people. There is general agreement that certain types of land uses are not compatible in high noise areas. Interference with speech, sleep disturbance, and nervousness are some of the human health effects of exposure to excessive noise.

Recommendations from the FAA and the Association of Bay Area Government's Regional Airports System Study (RASS) were used to establish airport/land use compatibility criteria for airports located in San Mateo County. The compatibility criteria contained in this Plan for Half Moon Bay Airport are based upon the following:

* Case histories of noise complaints near airports

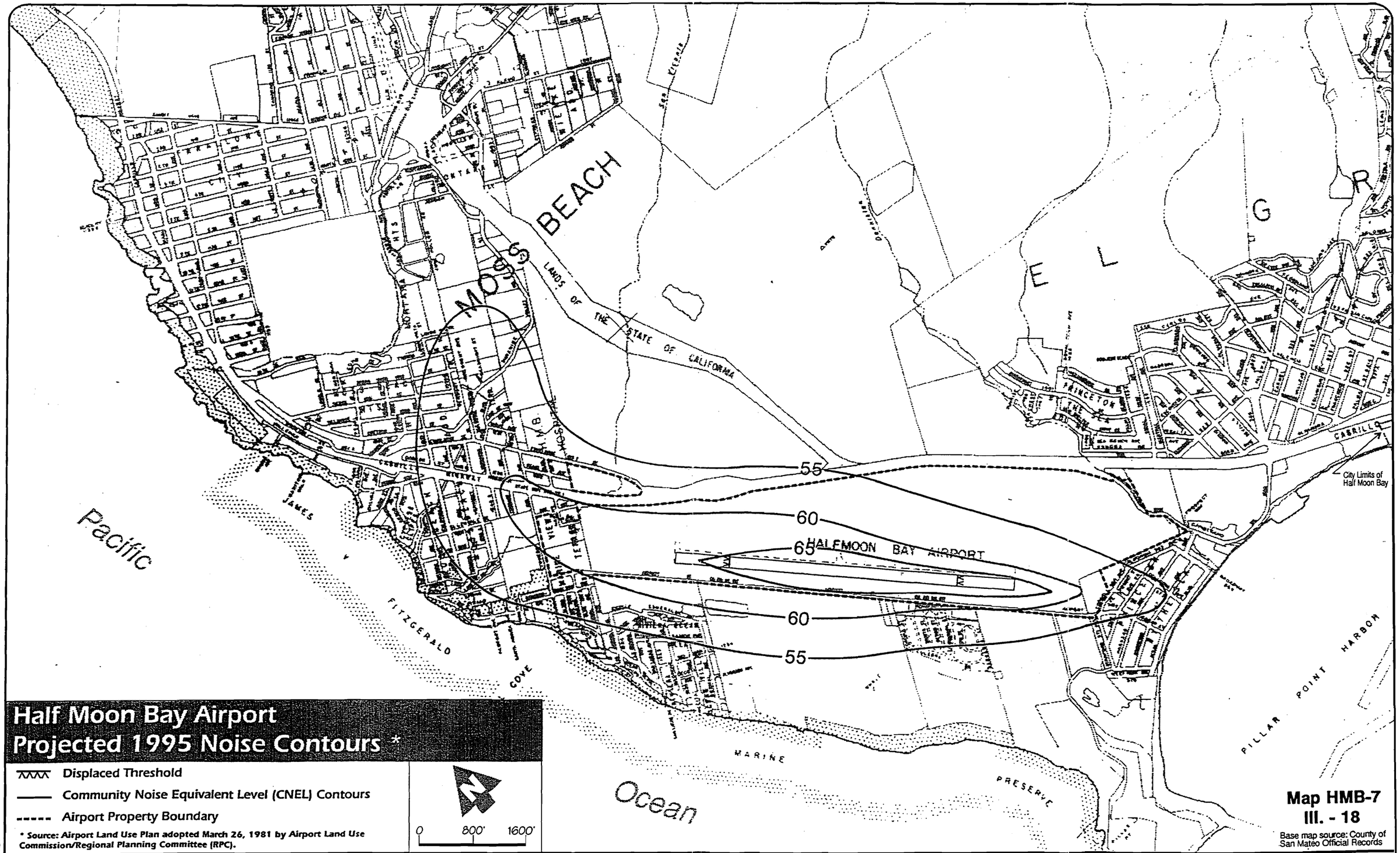
* How well speech can be understood at various noise levels

* Subjective tests of how much noise people judge as acceptable

* Need for freedom from noise

* Typical noise insulation provided by common types of building construction

The aircraft noise/land use compatibility criteria were developed for housing built with ordinary construction. The airport noise/land use compatibility criteria for the Half Moon Bay Airport Land Use Plan Area are shown in Table III.-2 on pages III.-19,20,21. The criteria indicate the compatibility of the proposed land uses listed, based on the relative CNEL range as shown. The Airport Land Use Commission (C/CAG) recognizes the 55 dB CNEL aircraft noise contour at Half Moon Bay Airport as the noise level threshold for reviewing and evaluating proposed land use policy actions.



Half Moon Bay Airport
Projected 1995 Noise Contours *

- Displaced Threshold
- Community Noise Equivalent Level (CNEL) Contours
- Airport Property Boundary

* Source: Airport Land Use Plan adopted March 26, 1981 by Airport Land Use Commission/Regional Planning Committee (RPC).

Map HMB-7
III. - 18

Base map source: County of San Mateo Official Records

San Mateo County Comprehensive Airport Land Use Plan
San Mateo County Airport Land Use Commission · December 1995

Half Moon Bay Airport Land Use Plan

cdr5\aluphmb6.cdr revds 10-12-95

Addition to Appendix K of the DEIR:

Membrane Bioreactor Equipment, Enviroquip and other documents related to wastewater treatment plant design

Big Wave Water System

Description

The Big Wave Water System is comprised of the following elements:

- Storm Water Infiltration
- Onsite Potable Water System
- Water Recycling
- Onsite Fire System

Big Wave will form a Mutual Water Company pursuant to the Public Utilities Code Section 2725. The water system will be permitted by the Environmental Health Department and the Department of Public Works of the County of San Mateo. Detailed plans and specifications will be submitted for review and approval during the building permit phase. The operation will be governed by the Environmental Health Department of the County of San Mateo in compliance with the requirements of the State Department of Public Health. Water Recycling shall comply with the requirements of the Regional Water Quality Control Board. The water system will be operated by the Wellness Center or other licensed contractor. The Mutual Water Company will also providing maintenance for the wastewater collection system and the in-building plumbing for both water and wastewater. The Mutual Water Company will provide invoicing for water used and water disposed.

Storm Water Infiltration System

The project site receives approximately 26 inches of rain per year. The ground water infiltration system is designed to infiltrate between 14 and 20 acre feet of rainwater per year from the roof and parking systems. The existing site is covered by a dense layer of clay that is 18 to 36 inches thick that allows virtually no infiltration. The system is designed to store storm water runoff with gradual infiltration providing biological treatment. The infiltration system will be approved and permitted by the County Department of Public Works and comply the County NPDES storm water permit, specifically specification c.3. This infiltration system has the following environmental benefits as opposed to conventional municipal water supply:

- The system replenishes the limited ground water supply.
- The system eliminates storm water runoff, site erosion and sediment transport into the surface water and surrounding habitat.
- The system is designed to slowly infiltrate through the aerobic soil bacteria zone to adsorb and treat organic compounds associated with vehicle parking.
- Storm water is infiltrated in the shallow water aquifer between the marsh/ocean protecting all domestic supply wells. The flow and direction of the flow is towards the ocean at an average of 500 acre feet per year. Given its location and volume, the infiltration system will not impact the quality of the domestic supply but will guarantee high quality water will continue to flow to the marsh and habitat.
- Operation of this system generates career jobs for Developmentally Disabled adults.

Onsite Potable Water System

The onsite domestic water system includes a well permitted and installed in 1987 and tested and approved by the County in 2009 with a sustained capacity of 34 gallons per minute (49,000 gallons per day) The well water will be treated with ozone for iron and manganese removal and disinfection. The peak average demand for the project is 10,000 gallons per day (11 acre feet per year) requiring the well to operate about 20% of the time. The well will be operated with a backup pump and emergency power. Water at the well after treatment will meet the standards of the Safe Water Drinking Act in Accordance with Title 22. The treated water will be distributed to each building. The building hookups will be 1 inch with a 5/8 inch meter. The buildings will include 6000 gallon storage tanks to provide backup supply with booster pumps to meet peak flow capacity. Each storage and booster pump system will circulate through a filtration system and UV disinfection to maintain the water pure. The filtration system will be designed to provide potable water meeting the specific quality requirements of the user. The system has the following environmental benefits as opposed to conventional municipal water supply:

- The water extracted by the well is less than the water that is recharged into the groundwater by the infiltration system. It is part of the sustainable local water system that has no negative impact to the ground water basin capacity. Water is a critical resource in the State and preserving and conserving this resource has a number of environmental benefits.
- The water system is sustainable and local thus eliminating the need to import water. Reducing the import of water reduces the impacts to the Tuolumne and Merced River systems in Yosemite. It protects the migration of fish through the Delta and clean water flows through the San Francisco Bay.
- The potable water system reduces green house gas production associated with water transport.
- The potable water system is based on small supply and low flows and protects the emergency capacity of the municipal water supplies.
- Operation of this system generates career jobs for Developmentally Disabled adults.

Water Recycling

The water system is designed to provide recycled water for the buildings, the landscaping, the sound and visual barriers and the wetlands restoration. The water recycling system is not an onsite sewage disposal system. The connection to Granada Sanitary District is the onsite sewer system. The water recycling system is comprised of a Membrane Bioreactor (MBR) with Ultraviolet Disinfection, 24 hours of influent and effluent storage provided for each building. Recycled water will comply with Title 22 for unrestricted use. The design for MBR system is attached. The design prepared by Enviroquip based on a 0.1 and 0.25 mgd plant. The MBR is scalable and also attached is the design for a 15,000 gallon per day plant. One plant of this size would be required for the Wellness Center and two plants of this size would be required for the Office Park to meet the criteria for complying Cult - 3. Recycled water will be used for in building toilet flushing, solar panel washing and parking lot cleaning. Recycled water will be used for landscape irrigation, wetlands restoration and organic farming. All recycled water for irrigation will be applied as subsurface drip irrigation. The water recycling system is designed to recycle and utilize all of the potable water extracted with the well. Any excess recycled water or water not meeting Title 22 will be discharged into the GSD sewer system. All flow to the GSD system will be metered and recorded continuously. It is estimated that a total of 8 EDUs will be purchased for emergency and excess discharge into the GSD system. It should be noted that 8

EDU is the estimated cost of the connection and the estimated maximum flow. The size of the connection is 8 inches.

The water recycling system will be comprised of a pressurized 4 inch pipe as shown on the tentative subdivision drawing. At peak development there will be approximately 40,000 gallons of recycled water storage on site in interconnect 6000 gallon buried tanks. The lower 10,000 gallons (first priority) of storage is reserved for toilet flushing and building wash down. This means that the pumps and valves for the toilet flushing will open at the bottom level of the storage system and shut off when there is no demand. The second priority recycled water use is for organic farming. The next 10,000 gallons per day will be reserved for this use (during the summer only). This means that the organic farm pumps and valves open at the 10,000 gallon level and shut off in the rainy season or when there is no demand. The remaining 20,000 gallons of storage will be reserved for wetlands and uplands restoration. This means that the wetlands restoration pumps and valves open when the storage tank exceeds 20,000 gallons. When the recycled water volume exceeds 40,000 gallons, it will spill over into the GSD system. It should be noted that the influent storage before the recycled system will be 24,000 gallons. The influent storage tanks will be operated normally empty with all sewage flowing to the recycling systems.

As stated on page IV.N-35 and 36, recycling water within the building reduces the total water demand for building use by 9000 to 16,000 gallons per day. As stated on page IV.N-33 the existing agricultural use is approximately 10,000 gallons per day. Table III-6 shows approximately 47% of the site in restored wetlands. Attached to the FEIR is the Wetlands Design Report. Figure 6, Planting Plan lists approximately 30,000 plants to be installed. Of this number approximately 15,000 are wetlands and uplands trees. The wetlands plants require saturated soil conditions all year long. The drip irrigation system is designed to provide water in circuits to saturate the soil but not flood the soil. The wetlands restoration will receive irrigation during the dry months for approximately 10 years. To saturate the soil during the summer will take about .5 gallons per day per shrub and about 2 gallons per day per tree. Based on this estimate, the restoration will take a minimum of 15,000 gallons of water per day during the summer for a successful restoration. A maturing willow tree can take up to 50 gallons per day. A mature willow or red alder can take up to 400 gallons per day. The wetlands restoration will be water with a minimum of 6 circuits, allowing watering for each circuit once every 6 days to allow the soil to drain.

The uplands restoration will be planted primarily with wetlands trees and shrubs in accordance with the Palustrine Scrub Shrub I and II Palustrine Forest I. Uplands are defined as greater than 2 feet above the wet season water table. This tree selection maximizes the biological benefits of the restoration and will be used visual and sound screening. Approximately 4000 upland trees and about 6000 upland shrubs form the visual and noise barrier and uplands restoration. The location of the trees and schubs will be placed on relatively permeable soil. The trees and shrubs will be watered with a minimum of 6 circuits for a water cycle once every 6 days to allow drainage. The primary watering for the uplands and sound barriers will occur in the first phase of construction. After the wetlands restoration is completed (5 to 15 years) and the farming is established (5 years), the majority of the watering of the uplands will occur during the wet season to add nutrients to the soil, stimulate root growth and provide for foliage for perennials. The uplands, sound barrier and visual screening will be planted in a manner to require a minimum of 11,000 gallons per day.

The recycling system has the following environmental benefits opposed to conventional municipal water supply and wastewater treatment.

- The use of recycled water in the buildings will reduce the potable water usage in the buildings by 45% to 60% thus reducing the ground water consumption and maintaining ground water recharge in excess of ground water extraction. Recycling water will reduce the landscape and farming use of potable water by 100%.
- The use of recycled water protects the ground water flow to the marsh and surrounding habitat.
- The use of recycled water for wetlands restoration insures an adequate water supply to the restoration even during drought restrictions or economic limitations due to the cost of using potable water.
- A dependable and adequate recycled water supply to the wetlands restoration will insure that the edge development impacts will be minimized and the habitat function of the existing marsh will be improved.
- A dependable and adequate recycled water supply to landscaping will insure that the visual and sound barriers for the project will be effective.
- A dependable and adequate recycled water supply to uplands landscaping will provide additional bird habitat.
- A dependable and adequate recycled water supply to the organic farm will provide food resources for the Developmentally Disabled Population on the Coast reducing the need for imported resources.
- Recycling Water is an approved method to reduce sewage flows.
- The water recycling system can store up to two days of recycled water and thus eliminate any discharge of sewage during wet weather flows.
- Contributing to the reduction of wet weather flows on the Coastside reduces the environmental hazard of raw sewage overflows that occur during the rainy season.
- Recycling water eliminates the projects fresh water discharge into the marine environment. Fresh water discharge into the marine environment is discouraged by the Coastal Act because of its negative environmental impacts.
- Recycling water reduces the flow to the SAM regional sewage treatment plant. SAM currently discharges partially disinfected wastewater within 2000 feet of Francis State Beach posing a public health risk for the heavily used beach for surfing and beach activities.
- SAM disinfects with chlorine that has known impacts to the marine environment resulting in tumors and reproductive malfunctions in marine animals.
- Operation of this system generates career jobs for Developmentally Disabled adults.

Fire Supply

The fire supply will be reviewed and approved by a third party contractor recommended by the Coastside Fire Protection District. The Fire Protection District will approve the issuance of the Building permits. The fire supply will be distributed to a hydrant system through a 12 inch ductile iron pipe to the hydrant and sprinkler system. The Wellness Center Swimming Pool will be sized to provide the recommended storage volume. A booster pump system powered by an emergency power system will provide the required flow and pressure. Until detailed review by the Fire Protection District, the proposed fire water system will deliver 2000 gallons per minute for up to 120 minutes at a minimum pressure of 35 psi. The fire system has the following benefits to conventional municipal water supply.

- The proposed system does not have the environmental impacts associated with expanding the existing municipal water supply lines.
- The proposed system does not have the impacts that include unacceptable pressure drop, line failure, inadequate flow and sediment being transmitted to residential during high flow that are associated with fire fighting utilizing older water systems.
- The system will not be chlorinated and the environmental impacts are reduced from the discharge of water during a fire.
- The proposed Fire System protects the existing municipal water supplies.
- Operation of this system generates career jobs for Developmentally Disabled adults.

Big Wave Water Treatment Plant

Project Objective

The water treatment plant will provide treatment for the well in a shallow ground water environment. The aeration tank is designed to remove iron and manganese and potential organic compounds with aeration. Precipitates and sediment will be removed in slow sand filters. The filters will be operated in a biological mode to remove nitrate and carbon. The treatment plant will include 6000 gallon aeration tanks, two 6000 gallon slow sand filter tanks and two 6000 gallon buried storage tanks. The plant will be constructed from the tanks that are currently onsite and adjacent to the well. The control equipment along with the well head will be located in a 4 ft x 4 ft x 4 ft fiberglass cabinet located as shown in the DEIR Figure 111-9. The tanks will be buried and surrounded by landscaping within the parking lot. Disinfection will be ultraviolet light with an option for Ozone, if additional taste and color removal is required. The system is designed with redundant tanks and pumps. Any tank or pump can be removed from service. The filters are designed to overflow into the aeration tanks. The well will be emergency power. The attached drawings show the plan and profile of the treatment plant.

Design Criteria

Well Pump Flow: 35 gpm
- Well Pump Cycle: 115 minutes on, 300 minutes off.

Well Pump Control: Low float in aeration tank: on, High Float: off

Aeration Tanks: 2 @ 6000 gallons:
- Aeration Equipment: 9 membrane diffusers per tanks, 1-4 to 8 cfm blower per tank
- O_2 Transfer Rate: 1 to 2 kg/hr.
- O_2 Demand (500 mg/l iron): 0.3 kg/hr- 0_2
- O_2 Demand (400 mg/l mang.): 0.36 kg/hr- 0_2

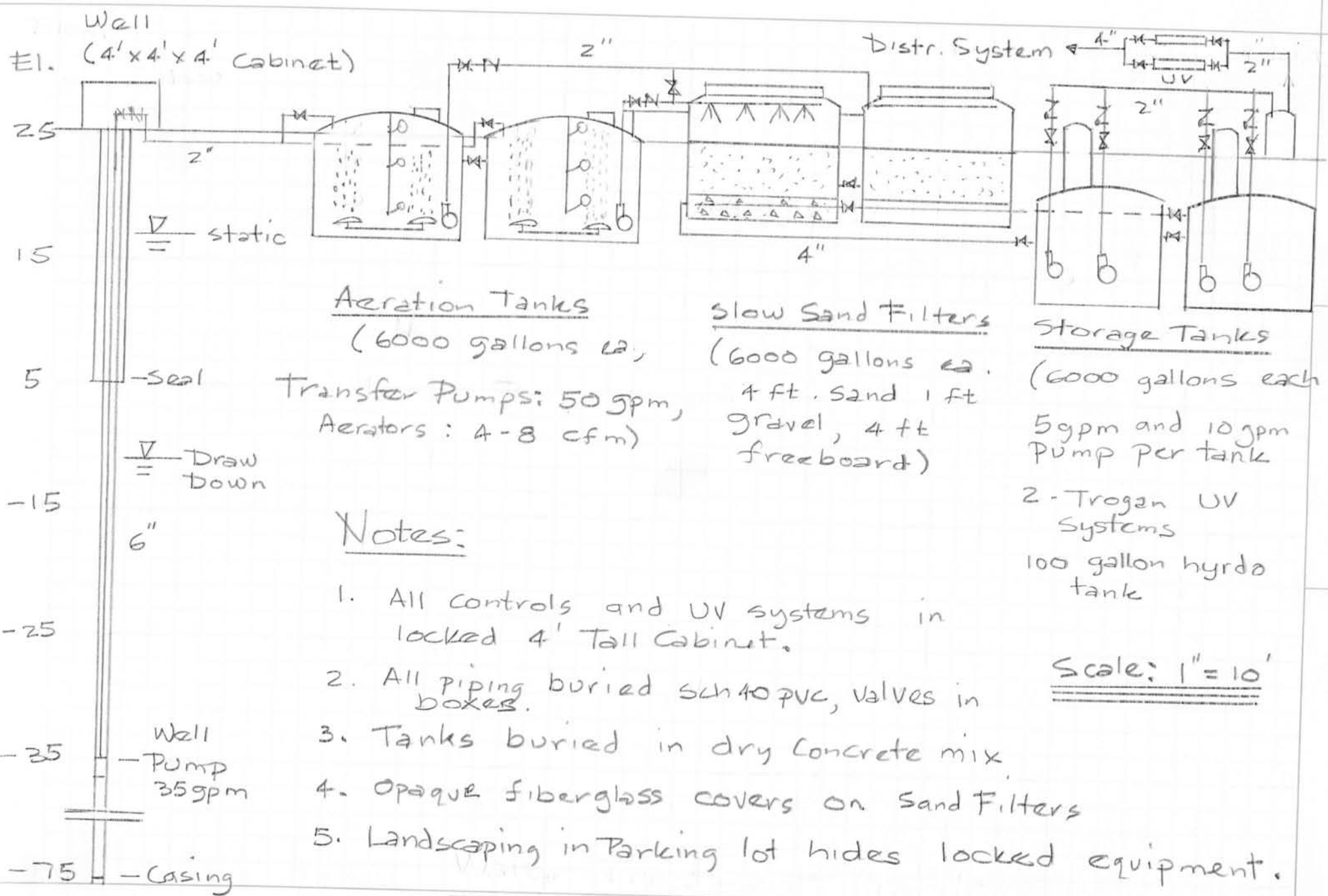
Slow Sand Filter:
- Average Flow Rate: 10 gpm (14,400 gpd)
- Peak Flow Rate: 20 gpm
- Average Filtration Rate: 5.5 mgad (on filter in operation), 2.75 mgad (two filters)
- Peak Filtration Rate: 11.0 mgad (one filter), 5,5 mgad (2 filters)
- Depth of Bed: 12 inches of clean gravel, 42 inches of Sand
- Sand Size: 0.3 to 0.35 mm, coefficient of non uniformity of 2.5
- Head Loss: 0.2 feet (initial clean) to 3 feet final (dirty)
- Distribution Piping: 2 inch pvc with ½ inch holes every 12 inches
- Underdrains: 4 inch pvc with ½ inch holes every 4 inches
- Solids Penetration: 3 inches
- Cleaning: 1) Rake Sand Daily, 2) Replace top 2 inches bi-monthly

UV Disinfection:
- Intensity: 40mJ/cm^2 (EPA Requirment), 5.4 M^3/HR
- Maximum Flow Rate: 2 at 30 gpm per lamp (Trojan Viqua SC 740)
- Aeration Tank Transfer Pumps: 50 gpm (one per tank)

Aeration Transfer Pump Cycle: 4000 gallons (2000 per tank), on 80 minutes, off 300 minutes

Aeration Transfer Pump Control: Low Storage Tank: on, High Storage Tank: Off

Storage Tank Pressure Pumps: Start: 5 gpm (35 psi), 5 gpm (32) psi, 10 gpm (29 psi), 10 gpm (26 psi). Off (40 psi)

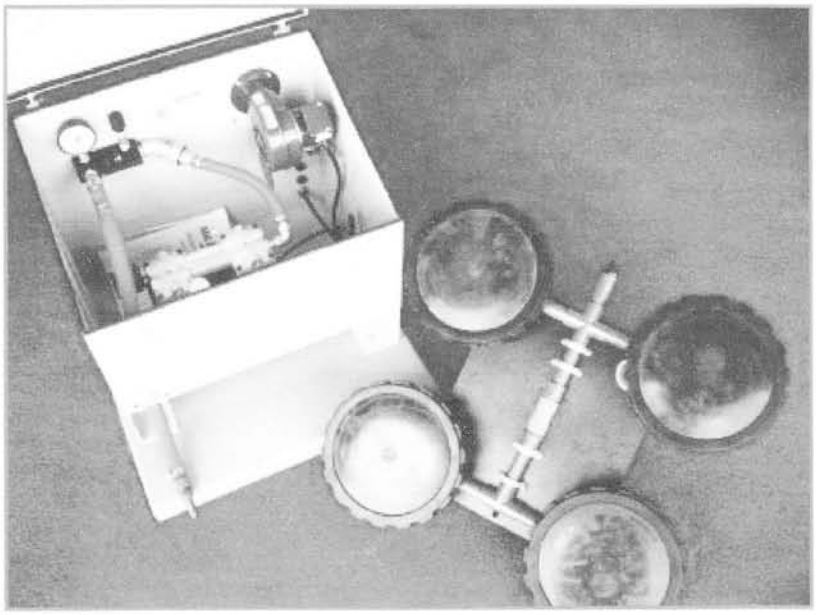


Notes:

1. All controls and UV systems in locked 4' Tall Cabinet.
2. All piping buried sch 40 PVC, valves in boxes.
3. Tanks buried in dry Concrete mix
4. Opaque fiberglass covers on Sand Filters
5. Landscaping in Parking lot hides locked equipment.

Scale: 1" = 10'

Water Treatment Plant Profile



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airBOOST-1dw [MEGA-LIFT] (115v) Aeration

- Model: airBOOST-1dw™ [MEGA-LIFT] (115v)
- Shipping Weight: 100lbs

Description Specs **Additional Images**

Specs

COMPRESSOR:
Compressor Type: High Pressure Rocking Piston
Horsepower: 1/3 horsepower
Volts: 115v
Amps: 5.3
Phase: Single
Maximum Depth: 30'
CFM Air @ 0': 4.4 CFM
CFM Air @ 30': 4.1 CFM
Estimated Operating Cost Per Month $28.00 (24/7)

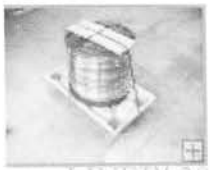
CABINET:
12-Gauge Aluminum with Baked Powder Coated Finish
22" x 15.5" x 18" Mounted On Polyethylene Pad
Easy Flow Built-In Cooling Grill
Pre-Installed 115v Thermal Removal 60CFM Cooling Fan
Pre-Installed 20amp GFCI Dual Plug Receptacle For Fan And Compressor
2 Water Resistant Built-In Outdoor Locking Clasps
Manufacturer Limited Lifetime Warranty

airBASE™ DIFFUSER:
Tubular Membrane Diffuser
Aquatic Lifting Capacity (6,900 gpm per airBASE™)
Design Flow 1.0 - 3.5 CFM Per airBASE™
Built-In Backflow Preventer
Produces Millions Of 500 To 3,000 Micron Bubbles
HDPE High Impact Black Diffuser Mounting Platform
Rugged HDPE Design Easy Sink Ballast Basin
All Schedule 80 PVC Connections
Manufacturer 5-Year Limited Warranty

Optional Accessories :

aquaLINE™ 100' x 5/8" Weighted Air-Supply Tubing (Non-Kinking)
$130.00

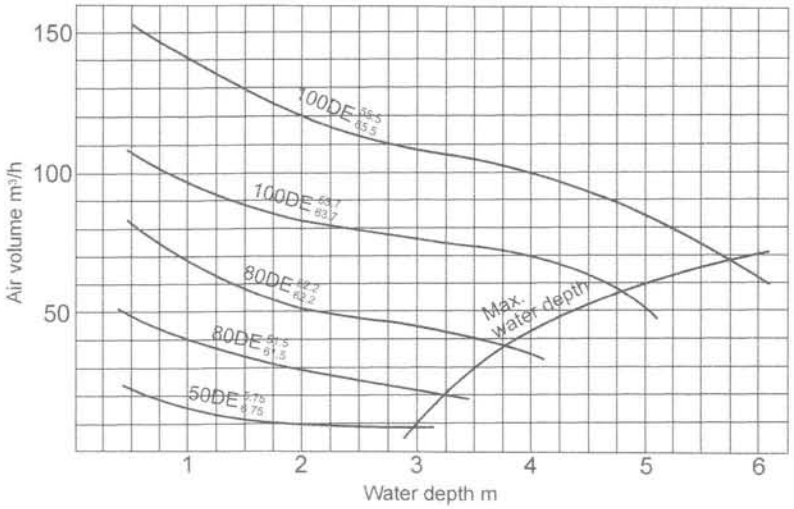
25 Pounds (1) Bucket "All-Season" Aerobic Pellets Bacteria
$299.00



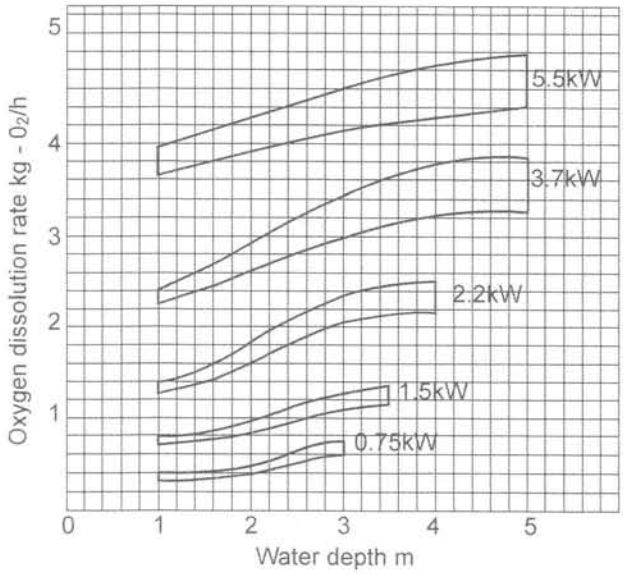
aquaLINE™ 300' x 5/8" Weighted Air-Tubing Reel (Non-Kinking)
$390.00

SELECTION CHART

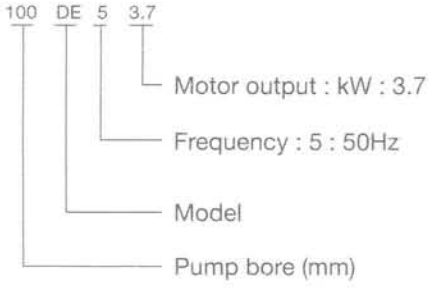
AIR FLOW RATE CHARACTERISTICS



OXYGEN DISSOLUTION RATE CHARACTERISTICS



SYMBOLS



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airBOOST-3dw (230v) Aeration System Surface Acres

- Model: airBOOST-3dw™ (230v)
- Shipping Weight: 87lbs

Description Specs **Additional Images**

Specs

COMPRESSOR:
Compressor Type: High Pressure Rocking Piston
Horsepower: 2/3-hp
Volts: 230v
Amps: 5.4
Phase: Single
Maximum Depth: 30'
CFM Air @ 0': 8.2 CFM
CFM Air @ 30': 7.4 CFM

CABINET:

Trojan UV System

Close

		SC-200	SC-320	SC-600	SC-740
Flow Rate (95% UVT eol)	US Public Health (16mJ/cm²)	56.8 lpm (15.0 gpm) (3.4 m³/Hr)	94.6 lpm (25.0 gpm) (5.7 m³/Hr)	227.1 lpm (60.0 gpm) (13.6 m³/Hr)	227.1 lpm (60.0 gpm) (13.6 m³/Hr)
	VIQUA Standard (30mJ/cm²)	30.3 lpm (8.0 gpm) (1.8 m³/Hr)	49.2 lpm (13.0 gpm) (3.0 m³/Hr)	121.1 lpm (32.0 gpm) (7.3 m³/Hr)	151.4 lpm (40.0 gpm) (9.1 m³/Hr)
	NSF/EPA (40mJ/cm²)	22.7 lpm (6.0 gpm) (1.4 m³/Hr)	37.8 lpm (10.0 gpm) (2.3 m³/Hr)	90.8 lpm (24.0 gpm) (5.4 m³/Hr)	113.6 lpm (30.0 gpm) (6.8 m³/Hr)
Dimensions	Length	45.2 cm (17.8 ")	57.9 cm (22.8 ")	78.0 cm (30.7 ")	100.1 cm (39.4 ")
	Diameter	8.9 cm (3.5 ")	8.9 cm (3.5 ")	8.9 cm (3.5 ")	8.9 cm (3.5 ")
	Controller	24.1 x 8.1 x 6.4 cm (9.4" x 3.2" x 2.5")	24.1 x 8.1 x 6.4 cm (9.4" x 3.2" x 2.5")	24.1 x 8.1 x 6.4 cm (9.4" x 3.2" x 2.5")	24.1 x 8.1 x 6.4 cm (9.4" x 3.2" x 2.5")
Inlet/Outlet Port Size		Combo 3/4" FNPT, 1" MNPT	1" MNPT	1" MNPT	1" MNPT
Shipping Weight		5.4 kg (11.9 lbs)	6.8 kg (15.0 lbs)	8.6 kg (19.0 lbs)	10.9 kg (24.0 lbs)
Electrical	Volts	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz	100-240V 50-60Hz
	Power Consumption	35 W	42 W	73 W	88 W
	Lamp Power	30 W	36 W	65 W	80 W
Operating Parameters	Maximum Operating Pressure	8.62 bar (125 PSI)	8.62 bar (125 PSI)	8.62 bar (125 PSI)	8.62 bar (125 PSI)
	Ambient Temperature	2-40 °C (36-104 °F)	2-40 °C (36-104 °F)	2-40 °C (36-104 °F)	2-40 °C (36-104 °F)
Audible Lamp Failure		Yes	Yes	Yes	Yes
Visual "Power On"		Yes	Yes	Yes	Yes
Reactor Chamber Material		304 S.S.	304 S.S.	304 S.S.	304 S.S.
Lamp Replacement Indicator		Yes	Yes	Yes	Yes
Lamp Type		Sterilume™-HO (high-output)	Sterilume™-HO (high-output)	Sterilume™-HO (high-output)	Sterilume™-HO (high-output)
Visual Lamp Life Remaining		Yes	Yes	Yes	Yes
Total Running Time		Yes	Yes	Yes	Yes

MBR BASINS #1 & 2
SWD: 8'-6"
9,000 gallons each

Notes:

1. The 15,000 gallon per day water recycling allows for 100% redundancy and/or 100% backup storage for the Wellness Center.
2. Two 15,000 per day systems allow for 100% backup storage and redundancy for the Office Park.

REVISION	EN	BY	CHK'D	DATE
INITIAL RELEASE	-	-	-	-

Enviroquip
a division of Eimco Water Technologies
A xylem COMPANY

DATE
DRAWN
CHECKED

HALF MOON BAY WWTP
HALF MOON BAY, CA
MBR BASIN LAYOUT
15,000 GPD

DRAWING SCALE
JOB NUMBER
SHEET OF
FILE NAME

B
REV
A

Enviroquip
a division of Eimco Water Technologies

2404 Rutland Drive, Suite 200
Austin, Texas 78758
Phone: 512.834.6000
Fax: 512.834.6039

Membrane Group
www.enviroquip.com

Membrane Bioreactor Equipment

For

Half Moon Bay WWTP (0.25 MGD)
California

Budgetary Proposal #
100107-1-KZ-R1

Proposal Date:
March 24, 2009

Prepared For:

Scott Holmes

Order information is available from our local sales representative:

Phil Pfeiffer
P&H Representatives, Inc.
Phone #: **707.425.0468**
Fax #: **707.426.5237**

Enviroquip
a division of Eimco Water Technologies

March 24, 2009

Scott Holmes, PE
Half Moon Bay, CA

RE: Half Moon Bay WWTP – Preliminary Proposal, Membrane Bioreactor System

Mr. Holmes:

Thank you very much for your interest in the ENVIROQUIP Membrane Bioreactor (MBR) system. Enclosed you will find a Preliminary Cost, Design Summary, Scope of Supply, Process Flow Diagram, P&IDs, and Basin Layout.

The ENVIROQUIP MBR system, utilizing Kubota submerged membrane units, was designed to be the simplest, easiest-to-operate, most operator-friendly membrane technology available. As a result, there are more Kubota MBR systems in operation worldwide than all other MBR manufacturers combined, and many of these Kubota systems have been in continuous operation for nearly 2 decades. At last count, there were over 2,500 wastewater treatment plants worldwide utilizing the Kubota flat plate membrane, including over 130 Enviroquip installations in the United States.

The benefits that the ENVIROQUIP MBR system offers include:

- Simple, reliable, consistent operation with minimal maintenance.
- The ability to operate in a high solids environment (up to 55,000 mg/l in a thickening application.).
- The best base warranty in the industry.
- In-situ maintenance cleaning eliminates the need for "dip tanks", excessive off-line time for recovery cleaning, backwashing, and complex cleaning equipment.
- Excellent structural design of the membrane resulting in only one replacement of membranes in twenty years.
- Incorporation of a biofilm on the surface of the flat-plate membrane to maximize the treatment capability.
- Low trans-membrane pressure allowing for either pumped or gravity flow through the membrane.

Pricing for the attached proposal is **$716,000**. This Preliminary Proposal constitutes a non-binding estimate of price for certain goods and/or services.

As part of the EIMCO Water Technology family of companies, ENVIROQUIP has access to an organization that has been involved in the construction of numerous biological wastewater treatment systems in North America. We look forward to working with you on this project. Please do not hesitate to contact me if you have any questions.

Sincerely,

Kimberly Mathis

Senior Regional Sales Manager
Membrane Bioreactors
ENVIROQUIP, a division of Eimco Water Technologies
Phone: 512.834.6035 Cell: 512.484.7600
Fax: 512.834.6039
www.enviroquip.com www.glv.com

Cc: Phil Pfeiffer, P&H

Enclosure

Enviroquip
a division of Eimco Water Technologies

2404 Rutland Drive, Suite 200
Austin, Texas 78758
Phone: 512.834.6000
Fax: 512.834.6039
MBR Group
www.enviroquip.com

Half Moon Bay WWTP (0.25 MGD MMF)
California
Proposal # 100107-1-KZ-R1

TABLE OF CONTENTS

Phasing Strategy

The proposed Half Moon Bay WWTP offers great flexibility for future expansion. Two identical trains, 0.125 MGD (MMF) each, are proposed for the full build out capacity of 0.25 MGD (MMF). The phasing plan for the Half Moon Bay WWTP is summarized as follows:

Phase	Maximum Monthly Flow (MGD)	Number of Trains Required to Handle Flows and Loads	Number of SMUs per MBR	Number of Diffuser Cases with no Membrane Cassettes per MBR
1	0.10	1	4	1
2	0.25	2	5	0

Phase 1: Basins proposed for the full capacity (0.25 MGD MMF) will be constructed. The equipment for one train will be installed. Four (4) submerged membrane units will be installed in the MBR basin for filtration. One (1) empty diffuser case (with no membrane cassettes) will also be installed to ensure complete mixing in the MBR basin.

Phase 2: Two trains will be required to operate in Phase for the higher flows. Additional equipment for the second Anoxic basin, Pre-Aeration basin, and MBR basin will be installed in Phase 2. Additional membrane cassettes will be installed on top of the empty diffuser case in the first membrane basin. Five (5) SMUs will be installed in the second MBR basin, so that there will be a total of 10 SMUs at full buildout.

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Design Summary

Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

Basis of Design				
Parameter	**Flow**	**Temperature**	**Typical Event Duration**	**Design Durations**
Average Annual Flow (AAF)	0.08 MGD *	20 °C *	9 consecutive months	9.0 months *
Max Month Flow (MMF)	0.10 MGD *	15 °C *	3 consecutive months	3.0 months *
Peak Week Flow (PWF) **	0.12 MGD *	15 °C *	3 non-consecutive weeks	3.0 weeks *
Peak Day Flow (PDF) **	0.20 MGD *	15 °C *	8 non-consecutive days	8.0 days *
Peak Hourly Flow (PHF) **	0.20 MGD *	15 °C *	4 hrs with 24 hrs between PHF	4.0 hours *

Parameter	Influent	Effluent Limits
BOD	300 mg/L *	< 5 mg/L *
TSS	300 mg/L *	< 5 mg/L *
TKN	40 mg/L *	< 3 mg/L *
NH_3	28 mg/L *	< 1 mg/L *
TP	8 mg/L *	< 1 mg/L *
TN	40 mg/L *	< 10 mg/L *
Alkalinity	300 mg/L *	< 75 mg/L *
Maximum Wastewater Temperature	25 °C *	
Elevation	69 ft *	

* Value assumed by Enviroquip, to be verified by consulting engineer.

** Peak values assumed to occur during MMF, to be verified by consulting engineer.

MBR Zone (Membrane) Design		
Parameter	**Value**	**Notes**
No. of Membrane Basins	1	
No. of Membrane Units per Basin	4	4 complete units with 1 diffuser case
No. of Diffuser Cases per Basin	1	1 diff. cases total
Membrane Unit Type	ES-200	cartridge: 510
No. of Cartridges per Unit	200	800 membrane cartridges total
Surface Area per Cartridge	8.60 ft2/cartridge	
Flux @ 0.08 MGD (AAF)	11.20 gal/(ft2 x day)	
Flux @ 0.10 MGD (MMF)	14.60 gal/(ft2 x day)	
Flux @ 0.12 MGD (PWF)	17.50 gal/(ft2 x day)	
Flux @ 0.20 MGD (PDF)	29.10 gal/(ft2 x day)	
Flux @ 0.20 MGD (PHF)	29.10 gal/(ft2 x day)	
Membrane Basin Volume	16,467 gal/basin	14ft x 18.5ft x 8.5ft SWD
Membrane Air Scour	61 scfm/unit	@ 3.9 PSIG discharge
AOR Supplied by Air Scour	136 lb O2/day	TMP Ranges from .5 - 3.0 PSI
MBR Basin MLSS	10,000 mg/L	

Anoxic Zone Design		
Parameter	**Value**	**Notes**
Basin Volume	7,265 gal/basin	7,265 gal total
Basin Dimensions	7ft x 18.5ft x 7.5ft SWD	
Anoxic MLSS	8,334 mg/L	
Recycle Rate	5 Q	From MBR to Anoxic Basin

Pre-Aeration Zone Design		
Parameter	**Value**	**Notes**
Basin Volume	17,091 gal/basin	17,091 gal total
Basin Dimensions	13ft x 18.5ft x 9.5ft SWD	
Pre-Aeration MLSS	8,334 mg/L	
Fine Bubble Diffuser AOR	224 lb O2/day	

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Design Summary

Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

System Design Parameters		
Parameter	**Value**	**Notes**
Plant HRT	9.6 hrs	
Design Plant SRT	13 days	
F:M ratio	0.08	

FEED FORWARD Pump Design		
Parameter	**Value**	**Notes**
FEED FORWARD Pumps	2	1 Duty, 1 Stdby
Type	SUBMERSIBLE	
Unit Capacity	521 GPM	Sized for 0.125MGD MMF
TDH	7.0 ft	

Permeate Pump Design		
Parameter	**Value**	**Notes**
Permeate Pumps	1	1 Duty, 0 Stdby
Type	CENTRIFUGAL	Pump-Assisted Gravity Design
Permeate Capacity @ MMF	77 GPM	Flow = 0.10 MGD * Capacity Incld Relax, pump sized for 0.125 MGD
Permeate Capacity @ PDF	154 GPM	Flow = 0.20 MGD * Capacity Incld Relax, pump sized for 0.125 MGD
TDH	10.0 ft	

Blower Design		
Parameter	**Value**	**Notes**
MBR Blowers	2	1 duty, 1 standby
Type	POSITIVE DISPLACEMENT	
Unit MBR Blower Capacity	770 SCFM	Blower sized for 0.25MGD MMF (Phase 2)
MBR Blower Discharge Pressure	3.93 PSIG discharge	
Pre-Aeration (PA) Blowers	2	1 duty, 1 standby
Type	POSITIVE DISPLACEMENT	
Unit PA Blower Capacity	247 SCFM	Blower sized for 0.25MGD MMF (Phase 2)
PA Blower Discharge Pressure	4.66 PSIG discharge	

Chemical Cleaning Design		
Parameter	**Value**	**Notes**
Cleaning chemical (organic fouling)	Sodium Hypochlorite	2 times/yr
Typical Cleaning Schedule	1-2	cleanings/basin/yr
Volume per Membrane	0.8 gal/cartridge	
Volume of Cleaning Solution	640 gal/basin	
Cleaning Solution Concentration	0.3%	
Volume of 12.5% Stock solution	13 gal/basin/cleaning	
Cleaning chemical (inorganic fouling)	Oxalic Acid	2 times/yr
Typical Cleaning Schedule	1-2	cleanings/basin/yr
Volume per Membrane	0.8 gal/cartridge	
Volume of Cleaning Solution	640 gal/basin	
Cleaning Solution Concentration	1.0%	
Volume of 100.0% Stock solution	6 gal/basin/cleaning	

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Design Summary

Half Moon Bay WWTP (Phase 2) (MMF 0.25 MGD)

Basis of Design				
Parameter	**Flow**	**Temperature**	**Typical Event Duration**	**Design Durations**
Average Annual Flow (AAF)	0.19 MGD *	20 °C *	9 consecutive months	9.0 months *
Max Month Flow (MMF)	0.25 MGD *	15 °C *	3 consecutive months	3.0 months *
Peak Week Flow (PWF) **	0.30 MGD *	15 °C *	3 non-consecutive weeks	3.0 weeks *
Peak Day Flow (PDF) **	0.50 MGD *	15 °C *	8 non-consecutive days	8.0 days *
Peak Hourly Flow (PHF) **	0.50 MGD *	15 °C *	4 hrs with 24 hrs between PHF	4.0 hours *

Parameter	Influent	Effluent Limits
BOD	300 mg/L *	< 5 mg/L *
TSS	300 mg/L *	< 5 mg/L *
TKN	40 mg/L *	< 3 mg/L *
NH_3	28 mg/L *	< 1 mg/L *
TP	8 mg/L *	< 1 mg/L *
TN	40 mg/L *	< 10 mg/L *
Alkalinity	300 mg/L *	< 75 mg/L *
Maximum Wastewater Temperature	25 °C *	
Elevation	69 ft *	

* Value assumed by Enviroquip, to be verified by consulting engineer.

** Peak values assumed to occur during MMF, to be verified by consulting engineer.

MBR Zone (Membrane) Design		
Parameter	**Value**	**Notes**
No. of Membrane Basins	2	
No. of Membrane Units per Basin	5	10 units total
Membrane Unit Type	ES-200	cartridge: 510
No. of Cartridges per Unit	200	2,000 membrane cartridges total
Surface Area per Cartridge	8.60 ft2/cartridge	
Flux @ 0.19 MGD (AAF)	11.20 gal/(ft2 x day)	
Flux @ 0.25 MGD (MMF)	14.60 gal/(ft2 x day)	
Flux @ 0.30 MGD (PWF)	17.50 gal/(ft2 x day)	
Flux @ 0.50 MGD (PDF)	29.10 gal/(ft2 x day)	
Flux @ 0.50 MGD (PHF)	29.10 gal/(ft2 x day)	
Membrane Basin Volume	16,467 gal/basin	14ft x 18.5ft x 8.5ft SWD
Membrane Air Scour	61 scfm/unit	@ 3.9 PSIG discharge
AOR Supplied by Air Scour	271 lb O2/day	TMP Ranges from .5 - 3.0 PSI
MBR Basin MLSS	10,000 mg/L	

Anoxic Zone Design		
Parameter	**Value**	**Notes**
Basin Volume	7,265 gal/basin	14,530 gal total
Basin Dimensions	7ft x 18.5ft x 7.5ft SWD	
Anoxic MLSS	8,334 mg/L	
Recycle Rate	5 Q	From MBR to Anoxic Basin

Pre-Aeration Zone Design		
Parameter	**Value**	**Notes**
Basin Volume	17,091 gal/basin	34,182 gal total
Basin Dimensions	13ft x 18.5ft x 9.5ft SWD	
Pre-Aeration MLSS	8,334 mg/L	
Fine Bubble Diffuser AOR	571 lb O2/day	

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Design Summary

Half Moon Bay WWTP (Phase 2) (MMF 0.25 MGD)

System Design Parameters		
Parameter	**Value**	**Notes**
Plant HRT	7.7 hrs	
Design Plant SRT	13 days	
F:M ratio	0.10	

FEED FORWARD Pump Design		
Parameter	**Value**	**Notes**
FEED FORWARD Pumps	4	2 Duty, 2 Stdby
Type	SUBMERSIBLE	
Unit Capacity	521 GPM	
TDH	7.0 ft	

Permeate Pump Design		
Parameter	**Value**	**Notes**
Permeate Pumps	2	2 Duty, 0 Stdby
Type	CENTRIFUGAL	Pump-Assisted Gravity Design
Permeate Capacity @ MMF	193 GPM	Flow = 0.25 MGD * (Capacity Includes Relax)
Permeate Capacity @ PDF	386 GPM	Flow = 0.50 MGD * (Capacity Includes Relax)
TDH	10.0 ft	

Blower Design		
Parameter	**Value**	**Notes**
MBR Blowers	2	1 duty, 1 standby
Type	POSITIVE DISPLACEMENT	
Unit MBR Blower Capacity	770 SCFM	
MBR Blower Discharge Pressure	3.93 PSIG discharge	
Pre-Aeration (PA) Blowers	2	1 duty, 1 standby
Type	POSITIVE DISPLACEMENT	
Unit PA Blower Capacity	247 SCFM	
PA Blower Discharge Pressure	4.66 PSIG discharge	

Chemical Cleaning Design		
Parameter	**Value**	**Notes**
Cleaning chemical (organic fouling)	Sodium Hypochlorite	2 times/yr
Typical Cleaning Schedule	1-2	cleanings/basin/yr
Volume per Membrane	0.8 gal/cartridge	
Volume of Cleaning Solution	800 gal/basin	
Cleaning Solution Concentration	0.3%	
Volume of 12.5% Stock solution	16 gal/basin/cleaning	
Cleaning chemical (inorganic fouling)	Oxalic Acid	2 times/yr
Typical Cleaning Schedule	1-2	cleanings/basin/yr
Volume per Membrane	0.8 gal/cartridge	
Volume of Cleaning Solution	800 gal/basin	
Cleaning Solution Concentration	1.0%	
Volume of 100.0% Stock solution	8 gal/basin/cleaning	

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Scope of Supply
Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

	HEADWORKS GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
2	SCREENING	FINE SCREEN	BAR SCREEN	300	gpm	ENVIROQUIP	0.25
1	SCREEN CONTAINER	SCREEN BOX	TRIPLE	FS-800S	N/A	ENVIROQUIP	N/A
1	INFLUENT FLOW MEASUREMENT	FLOW METER	ELECTROMAGNETIC	4.0	Inch	ENDRESS & HAUSER	N/A
1	PLANT WATER ISOLATION	AUTOMATED VALVE	SOLENOID (WITH CWC)	1.0	Inch	N/A	N/A
1	PLANT WATER ISOLATION	VALVE	BALL	2.0	Inch	ASAHI	N/A
1	SOLIDS HANDLING	CONVEYOR WASHER COMPACTOR	SCREW	350	gpm	ENVIROQUIP	N/A
2	LEVEL MEASUREMENT	LEVEL SWITCH	FLOAT	N/A	N/A	CONERY	N/A
	ANOXIC ZONE GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	BASIN MIXING	MIXER	SUBMERSIBLE	7,265	gallons	ABS	2.10
1	MIXER SUPPORT	MIXER SUPPORT HARDWARE & GUIDE RAIL	RAIL MOUNT	SS	N/A	N/A	N/A
1	LEVEL MEASUREMENT	LEVEL TRANSMITTER	HYDROSTATIC	N/A	N/A	BLUE RIBBON	N/A
2	LEVEL MEASUREMENT	LEVEL SWITCH	FLOAT	N/A	N/A	CONERY	N/A
	INTERNAL RECYCLE GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
2	FEED FORWARD	PUMP	SUBMERSIBLE	521	gpm	ABS	2.00
2	PUMP ISOLATION	VALVE	PLUG	6.0	Inch	PRATT	N/A
2	FLOW DIRECTION	VALVE	CHECK	6.0	Inch	KEYSTONE	N/A
1	FEED FORWARD FLOW METER	FLOW METER	ELECTROMAGNETIC	6.0	Inch	ENDRESS & HAUSER	N/A
1	PRE-AIR BYPASS	VALVE	PLUG	6.0	Inch	PRATT	N/A
1	PRE-AIR ISOLATION	VALVE	PLUG	6.0	Inch	PRATT	N/A
1	WAS ISOLATION	VALVE	BALL	2.0	Inch	ASAHI	N/A
1	WAS TRANSFER FLOW METER	FLOW METER	ELECTROMAGNETIC	2.0	Inch	ENDRESS & HAUSER	N/A
1	MBR BASIN ISOLATION	VALVE	PLUG	6.0	Inch	PRATT	N/A

Scope of Supply
Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

PRE-AERATION ZONE GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	BASIN MIXING	MIXER	SUBMERSIBLE	17,091	gallons	ABS	2.30
1	MIXER SUPPORT	MIXER SUPPORT HARDWARE & GUIDE RAIL	RAIL MOUNT	SS	N/A	N/A	N/A
1	AERATION	DIFFUSER	FINE BUBBLE	125	SCFM	EDI	N/A
1	DISSOLVED OXYGEN MEASURMENT	DO PROBE	LDO	0-10	mg/L DO	HACH	N/A
1	DO TRANSMITTER	ANALOG TRANSMITTER	SC100	N/A	N/A	HACH	N/A
MBR ZONE GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
4	MEMBRANE FILTRATION	SUBMERGED MEMBRANE UNIT	FLAT PLATE	N/A	N/A	KUBOTA	N/A
1	AERATION	DIFFUSER CASE	FLAT PLATE	N/A	N/A	KUBOTA	N/A
10	VIBRATION ISOLATION	DIFFUSER EXPANSION JOINT	BULB	3.0	Inch	API	N/A
5	DIFFUSER INLET ISOLATION	VALVE	BUTTERFLY	3.0	Inch	KEYSTONE	N/A
5	DIFFUSER OUTLET ISOLATION	VALVE	PLUG	3.0	Inch	PRATT	N/A
5	VIBRATION ISOLATION	PERMEATE BRANCH EXPANSION JOINT	BULB	2.5	Inch	API	N/A
5	PERMEATE BRANCH ISOLATION	VALVE	BALL	2.5	Inch	ASAHI	N/A
2	LEVEL MEASUREMENT	LEVEL SWITCH	FLOAT	N/A	N/A	CONERY	N/A
1	DIFFUSER CLEANING	AUTOMATED VALVE	2 POSITION PLUG	6.0	Inch	PRATT / BETTIS	N/A
1	CHEMICAL CLEANING ISOLATION	VALVE	BALL	2.0	Inch	ASAHI	N/A
1	SLUDGE RETURN	TELESCOPING VALVE	SLIP TUBE	7.0	Inch	ENVIROQUIP	N/A
1	SLUDGE RETURN	TELESCOPING VALVE	RECEIVING TUBE	8.0	Inch	ENVIROQUIP	N/A
1	SLUDGE RETURN	TELESCOPING VALVE	HAND WHEEL ASSEMBLY	N/A	Inch	ENVIROQUIP	N/A
1	PERMEATE HEADER ISOLATION	VALVE	BUTTERFLY	6.0	Inch	ASAHI	N/A
5	FABRICATION	STRUCTURAL GUIDES & STABILIZER PIPES	N/A	N/A	N/A	ENVIROQUIP	N/A
5	FABRICATION	IN-BASIN PIPING & SUPPORTS	N/A	N/A	N/A	ENVIROQUIP	N/A

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Scope of Supply
Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

	PERMEATE CONTROL GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	TMP MEASUREMENT	PRESSURE TRANSMITTER	DIAPHRAGM	-15-+15	PSI	ENDRESS & HAUSER	N/A
1	PERMEATE PUMP	PUMP	CENTRIFUGAL	193	gpm	GORMAN RUPP	2.00
2	VIBRATION ISOLATION	EXPANSION JOINT	BULB	4.0	Inch	API	N/A
2	PUMP ISOLATION	VALVE	BALL	4.0	Inch	ASAHI	N/A
1	VENT	VALVE	SOLENOID	1.0	Inch	APCO	N/A
1	PUMP INLET PRESSURE	GAUGE	COMPOUND	-30-+15	Inch Hg/PSI	MCDANIEL	N/A
1	PUMP OUTLET PRESSURE	GAUGE	PRESSURE	0-15	PSI	MCDANIEL	N/A
1	FLOW DIRECTION (PUMPED)	VALVE	CHECK	4.0	Inch	ASAHI	N/A
1	FLOW DIRECTION (GRAVITY)	VALVE	CHECK	4.0	Inch	ASAHI	N/A
1	ON/OFF	VALVE	NEEDLE	0.25	Inch	ASAHI	N/A
1	FLOW MEASUREMENT	FLOW METER	ELECTROMAGNETIC	4.0	Inch	ENDRESS & HAUSER	N/A
1	FLOW CONTROL	AUTOMATED VALVE	MODULATING BALL	4.0	Inch	ASAHI / BETTIS	N/A
1	TURBIDITY MEASUREMENT	TURBIDITY METER	OPTICAL	0-100	NTU	HACH	N/A
1	TURBIDITY / PH TRANSMITTER	ANALOG TRANSMITTER	SC100	N/A	N/A	HACH	N/A
	MBR AERATION GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
2	MBR BLOWER	BLOWER	POSITIVE DISPLACEMENT	770	SCFM	KAESER	40.00
2	MBR NOISE SUPPRESSION	SOUND ENCLOSURE	WITH BLOWER	N/A	N/A	KAESER	N/A
2	MBR BLOWER TEMP	TEMPERATURE GAUGE	WITH BLOWER	N/A	N/A	KAESER	N/A
2	MBR BLOWER PRESSURE	PRESSURE GAUGE	WITH BLOWER	N/A	N/A	KAESER	N/A
2	MBR BLOWER TEMP SWITCH	TEMPERATURE SWITCH	WITH BLOWER	N/A	N/A	KAESER	N/A
3	MBR BLOWER FLOW CONTROL	VALVE	CHECK (WITH BLOWER)	N/A	N/A	KAESER	N/A
2	MBR BLOWER PRESSURE RELIEF	VALVE	PRESSURE RELIEF (WITH BLOWER)	N/A	N/A	KAESER	N/A
4	MBR AIR ISOLATION	VALVE	BUTTERFLY	8.0	Inch	KEYSTONE	N/A
1	MBR BLOWER FLOW CONTROL	AUTOMATED VALVE	MODULATING BUTTERFLY	6.0	N/A	KEYSTONE / BETTIS	N/A
1	MBR AIR FLOW MEASUREMENT	FLOW METER	MASS AIR FLOW	6.0	Inch	SIERRA	N/A

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Scope of Supply
Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

PA AIR SUPPLY GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
2	PA BLOWER	BLOWER	POSITIVE DISPLACEMENT	247	SCFM	KAESER	15.00
2	PA NOISE SUPPRESSION	SOUND ENCLOSURE	WITH BLOWER	N/A	N/A	KAESER	N/A
2	PA BLOWER TEMP	TEMPERATURE GAUGE	WITH BLOWER	N/A	N/A	KAESER	N/A
2	PA BLOWER PRESSURE	PRESSURE GAUGE	WITH BLOWER	N/A	N/A	KAESER	N/A
2	PA BLOWER TEMP SWITCH	TEMPERATURE SWITCH	WITH BLOWER	N/A	N/A	KAESER	N/A
2	PA BLOWER FLOW CONTROL	VALVE	CHECK (WITH BLOWER)	N/A	N/A	KAESER	N/A
2	PA BLOWER PRESSURE RELIEF	VALVE	PRESSURE RELIEF (WITH BLOWER)	N/A	N/A	KAESER	N/A
1	PA BLOWER FLOW CONTROL	AUTOMATED VALVE	MODULATING BUTTERFLY	4.0	N/A	KEYSTONE / BETTIS	N/A
2	PA AIR ISOLATION	VALVE	BUTTERFLY	4.0	Inch	KEYSTONE	N/A
1	MBR AIR FLOW MEASUREMENT	FLOW METER	MASS AIR FLOW	4.0	Inch	SIERRA	N/A
COAGULANT DOSING GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
2	ALUM METERING PUMP	PUMP	DIAPHRAGM	17	gpd	WALCHEM	N/A
2	PUMP SKID	SKID	N/A	N/A	N/A	N/A	N/A
1	MIXER	MIXER	SUBMERSIBLE	N/A	N/A	ABS	1
1	LEVEL MEASUREMENT	LEVEL TRANSMITTER	HYDROSTATIC	N/A	N/A	BLUE RIBBON	N/A
1	VALVE	PUMP ISOLATION	BALL	1	inch	ASAHI	N/A
SMU CIP GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	MAZZIE INJECTOR	INJECTOR	VENTURI	2.0	Inch	MAZZEI INJECTOR CORP	N/A
1	WATER SUPPLY VALVE	AUTOMATED VALVE	MODULATING BALL	2.0	Inch	ASAHI / BETTIS	N/A
2	CIP THROTTLING	VALVE	GLOBE	2.0	Inch	N/A	N/A
2	INJECTOR PRESSURE	GAUGE	PRESSURE	0-15	PSI	MCDANIEL	N/A
2	GAUGE ISOLATION	VALVE	BALL	0.5	Inch	ASAHI	N/A
1	FLOW DIRECTION	VALVE	CHECK	2.0	Inch	ASAHI	N/A
1	CHEMICAL ISOLATION	VALVE	BALL	2.0	Inch	ASAHI	N/A
1	PRESSURE CONTROL	VALVE	PRESSURE REGULATOR VALVE	2.0	Inch	WILKINS	N/A
1	CHEMICAL FLOW	FLOW METER	ROTOMETER	8-80	gpm	BLUE WHITE	N/A
1	FLOW MEASUREMENT	FLOW METER	ELECTROMAGNETIC	2.0	Inch	ENDRESS & HAUSER	N/A
1	INJECTOR ASSEMBLY	PIPE SPOOL	SUCTION	N/A	N/A	ENVIROQUIP	N/A

Scope of Supply
Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

1	CHEMICAL TRANSFER TO MBR	HOSE	SUCTION	1.0	Inch	TIGERFLEX	N/A

Scope of Supply
Half Moon Bay WWTP (Phase 1) (MMF 0.10 MGD)

	CONTROLS GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	PLANT CONTROL	SCADA	SOFTWARE	N/A	N/A	WONDERWARE	N/A
1	PLANT CONTROL	HMI	PANEL MOUNT PC	N/A	N/A	N/A	N/A
1	PLANT CONTROL	PLC PANEL	N/A	N/A	N/A	N/A	N/A
	MISCELLANEOUS GENERAL EQUIPMENT INFORMATION						
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	ENGINEERING DESIGN	N/A	N/A	N/A	N/A	N/A	N/A
5	INSTALLATION SERVICES	N/A	N/A	N/A	N/A	N/A	N/A
5	START-UP	N/A	N/A	N/A	N/A	N/A	N/A
5	PERFORMANCE TESTING	N/A	N/A	N/A	N/A	N/A	N/A
5	TRAINING	N/A	N/A	N/A	N/A	N/A	N/A
5	OPERATION & MAINTENANCE MANUALS	N/A	N/A	N/A	N/A	N/A	N/A
1	SMU FREIGHT	N/A	N/A	N/A	N/A	N/A	N/A
1	EQUIPMENT FREIGHT	N/A	N/A	N/A	N/A	N/A	N/A

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Scope of Supply
Half Moon Bay WWTP (Phase 2, 0.10 - 0.25 MGD Adder)

HEADWORKS GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	SCREENING	FINE SCREEN	BAR SCREEN	300	gpm	ENVIROQUIP	0.25
ANOXIC ZONE GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	BASIN MIXING	MIXER	SUBMERSIBLE	7,265	gallons	ABS	2.10
1	MIXER SUPPORT	MIXER SUPPORT HARDWARE & GUIDE RAIL	RAIL MOUNT	SS	N/A	N/A	N/A
1	LEVEL MEASUREMENT	LEVEL TRANSMITTER	HYDROSTATIC	N/A	N/A	BLUE RIBBON	N/A
2	LEVEL MEASUREMENT	LEVEL SWITCH	FLOAT	N/A	N/A	CONERY	N/A
INTERNAL RECYCLE GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
2	FEED FORWARD	PUMP	SUBMERSIBLE	521	gpm	ABS	2.00
2	PUMP ISOLATION	VALVE	PLUG	6.0	Inch	PRATT	N/A
2	FLOW DIRECTION	VALVE	CHECK	6.0	Inch	KEYSTONE	N/A
1	FEED FORWARD FLOW METER	FLOW METER	ELECTROMAGNETIC	6.0	Inch	ENDRESS & HAUSER	N/A
1	PRE-AIR BYPASS	VALVE	PLUG	6.0	Inch	PRATT	N/A
1	PRE-AIR ISOLATION	VALVE	PLUG	6.0	Inch	PRATT	N/A
1	WAS ISOLATION	VALVE	BALL	2.0	Inch	ASAHI	N/A
1	WAS TRANSFER FLOW METER	FLOW METER	ELECTROMAGNETIC	2.0	Inch	ENDRESS & HAUSER	N/A
1	MBR BASIN ISOLATION	VALVE	PLUG	6.0	Inch	PRATT	N/A
PRE-AERATION ZONE GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	BASIN MIXING	MIXER	SUBMERSIBLE	17,091	gallons	ABS	2.30
1	MIXER SUPPORT	MIXER SUPPORT HARDWARE & GUIDE RAIL	RAIL MOUNT	SS	N/A	N/A	N/A
1	AERATION	DIFFUSER	FINE BUBBLE	125	SCFM	EDI	N/A
1	DISSOLVED OXYGEN MEASURMENT	DO PROBE	LDO	0-10	mg/L DO	HACH	N/A
1	DO TRANSMITTER	ANALOG TRANSMITTER	SC100	N/A	N/A	HACH	N/A

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Scope of Supply
Half Moon Bay WWTP (Phase 2, 0.10 - 0.25 MGD Adder)

MBR ZONE GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
6	MEMBRANE FILTRATION	SUBMERGED MEMBRANE UNIT	FLAT PLATE	N/A	N/A	KUBOTA	N/A
10	VIBRATION ISOLATION	DIFFUSER EXPANSION JOINT	BULB	3.0	Inch	API	N/A
5	DIFFUSER INLET ISOLATION	VALVE	BUTTERFLY	3.0	Inch	KEYSTONE	N/A
5	DIFFUSER OUTLET ISOLATION	VALVE	PLUG	3.0	Inch	PRATT	N/A
5	VIBRATION ISOLATION	PERMEATE BRANCH EXPANSION JOINT	BULB	2.5	Inch	API	N/A
5	PERMEATE BRANCH ISOLATION	VALVE	BALL	2.5	Inch	ASAHI	N/A
2	LEVEL MEASUREMENT	LEVEL SWITCH	FLOAT	N/A	N/A	CONERY	N/A
1	DIFFUSER CLEANING	AUTOMATED VALVE	2 POSITION PLUG	6.0	Inch	PRATT / BETTIS	N/A
1	CHEMICAL CLEANING ISOLATION	VALVE	BALL	2.0	Inch	ASAHI	N/A
1	SLUDGE RETURN	TELESCOPING VALVE	SLIP TUBE	7.0	Inch	ENVIROQUIP	N/A
1	SLUDGE RETURN	TELESCOPING VALVE	RECEIVING TUBE	8.0	Inch	ENVIROQUIP	N/A
1	SLUDGE RETURN	TELESCOPING VALVE	HAND WHEEL ASSEMBLY	N/A	Inch	ENVIROQUIP	N/A
1	PERMEATE HEADER ISOLATION	VALVE	BUTTERFLY	6.0	Inch	ASAHI	N/A
5	FABRICATION	STRUCTURAL GUIDES & STABILIZER PIPES	N/A	N/A	N/A	ENVIROQUIP	N/A
5	FABRICATION	IN-BASIN PIPING & SUPPORTS	N/A	N/A	N/A	ENVIROQUIP	N/A
PERMEATE CONTROL GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	TMP MEASUREMENT	PRESSURE TRANSMITTER	DIAPHRAGM	-15-+15	PSI	ENDRESS & HAUSER	N/A
1	PERMEATE PUMP	PUMP	CENTRIFUGAL	193	gpm	GORMAN RUPP	2.00
2	VIBRATION ISOLATION	EXPANSION JOINT	BULB	4.0	Inch	API	N/A
2	PUMP ISOLATION	VALVE	BALL	4.0	Inch	ASAHI	N/A
1	VENT	VALVE	SOLENOID	1.0	Inch	APCO	N/A
1	PUMP INLET PRESSURE	GAUGE	COMPOUND	-30-+15	Inch Hg/PSI	MCDANIEL	N/A
1	PUMP OUTLET PRESSURE	GAUGE	PRESSURE	0-15	PSI	MCDANIEL	N/A
1	FLOW DIRECTION (PUMPED)	VALVE	CHECK	4.0	Inch	ASAHI	N/A
1	FLOW DIRECTION (GRAVITY)	VALVE	CHECK	4.0	Inch	ASAHI	N/A
1	FLOW MEASUREMENT	FLOW METER	ELECTROMAGNETIC	4.0	Inch	ENDRESS & HAUSER	N/A
1	FLOW CONTROL	AUTOMATED VALVE	MODULATING BALL	4.0	Inch	ASAHI / BETTIS	N/A

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Scope of Supply
Half Moon Bay WWTP (Phase 2, 0.10 - 0.25 MGD Adder)

MBR AERATION GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	MBR BLOWER FLOW CONTROL	AUTOMATED VALVE	MODULATING BUTTERFLY	6.0	N/A	KEYSTONE / BETTIS	N/A
1	MBR AIR FLOW MEASUREMENT	FLOW METER	MASS AIR FLOW	6.0	Inch	SIERRA	N/A
PA AIR SUPPLY GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	PA BLOWER FLOW CONTROL	AUTOMATED VALVE	MODULATING BUTTERFLY	4.0	N/A	KEYSTONE / BETTIS	N/A
1	MBR AIR FLOW MEASUREMENT	FLOW METER	MASS AIR FLOW	4.0	Inch	SIERRA	N/A
COAGULANT DOSING GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
4	VALVE	PUMP ISOLATION	BALL	1	inch	ASAHI	N/A
CONTROLS GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
1	PLANT CONTROL	PROGRAMMING	SOFTWARE	N/A	N/A	N/A	N/A
MISCELLANEOUS GENERAL EQUIPMENT INFORMATION							
QTY	Function	Name	Type	Size or Unit Capacity	Value	Manufacturer	Motor HP
5	INSTALLATION SERVICES	N/A	N/A	N/A	N/A	N/A	N/A
5	START-UP	N/A	N/A	N/A	N/A	N/A	N/A
5	PERFORMANCE TESTING	N/A	N/A	N/A	N/A	N/A	N/A
5	TRAINING	N/A	N/A	N/A	N/A	N/A	N/A
1	SMU FREIGHT	N/A	N/A	N/A	N/A	N/A	N/A
1	EQUIPMENT FREIGHT	N/A	N/A	N/A	N/A	N/A	N/A

The following items will be the scope of work and responsibilities by others. These items include, but are not limited to:

Overall Plant Design

- Responsible for the overall plant design and execution of that design.
- Review and approve ENVIROQUIP biological process design.
- Since no seismic requirements were given, it is assumed that none of the equipment, anchoring systems, etc. needs to meet specific seismic requirements. ENVIROQUIP assumes that assessment of seismic requirements is by others.
- Since no area classifications were given, it is assumed no area classifications are present. ENVIROQUIP assumes that assessment of area classifications is by others.

Equipment Drawings and Specifications

- Design parameters related to membrane separation.
    - Review and approve.
- ENVIROQUIP supplied equipment specifications and drawings.
    - Review and approve.
- Detail drawings of all termination points.
    - Show locations where equipment and materials supplied by others tie into ENVIROQUIP equipment and/or materials.

Civil Works

Provisioning to include, but not limited to:

- Buildings, plant tank structures, equipment foundations and mounting pads, various process piping and connections.
- Building floor drains and below slab piping.
- Fall protection: equipment accesses platforms, walkways, stairs, covers, handrails, etc.
- HVAC equipment design and installation (where applicable).
- Emergency power supply, UPS, power conditioner (where applicable).

Equipment Supply

Provisioning to include, but not limited to:

- Motor control center for all equipment.
- All pipe supports, link seals, pipe sleeves, or any other wall penetration system.
- Freeze protection: heat tracing, insulation, or related controls and appurtenances (as required).
- Wiring or conduit for all equipment (by ENVIROQUIP and by Others).
- Any equipment, piping, valves, or fittings not expressly indicated in ENVIROQUIP's scope of supply.

- Variable frequency drives, motor starters, or controls for equipment not expressly indicated in ENVIROQUIP's scope of supply.
- Anchoring, bolts, brackets, and fasteners for all equipment and appurtenances.
- Any other equipment or services not supplied by ENVIROQUIP, but necessary for an operational plant.

Receiving and Storage

Receive, unload, and provide safe storage of equipment, materials and parts at site until ready to install.

System and Equipment Installation

Install equipment supplied by ENVIROQUIP and by others to include, but not limited to:

- Membrane units, in accordance with ENVIROQUIP's installation instructions.
- Pumps, blowers, mixers, aeration systems, gates, headworks equipment, instrumentation, controls, etc. in accordance with manufacturer's installation instructions.

Piping Installation

Install interconnecting piping to include, but not limited to;

- Piping, pipe supports, hangers, and valves between ENVIROQUIP supplied equipment and components.
- Piping, pipe supports, hangers, and valves between ENVIROQUIP supplied equipment/components and equipment/components supplied by others.
- Process tank aeration system air piping, equalization tank system piping, etc.
- Install all required anchoring, bolts, brackets and fasteners.

Electrical Installation

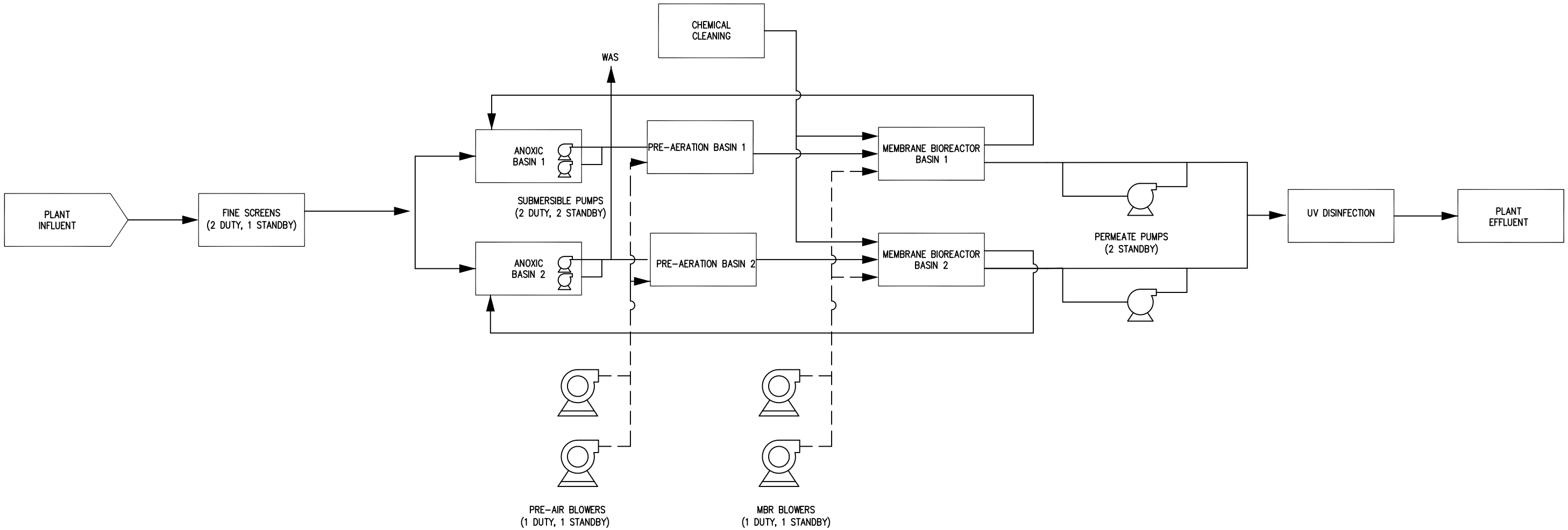
Install electrical to include, but not limited to;

- Electrical wiring, conduit and other components required to provide power connections to ENVIROQUIP supplied equipment and components.
- Install motor control center and required connections to control panels
- Install control panels and required connections to any electrical equipment (motors, instruments, etc.) external to the panel.

Miscellaneous

- Painting. Any on-site painting or touch-up painting of equipment.
- Provide as necessary, wrapping tape or cathodic protection for any pipe penetrations.

- Provide any plastic coding pipe markers, legend markers, or directional arrows. Any piping supplied by Enviroquip will be piece-marked for erection purposes.
- Bulk chemical storage.
- Supply chemical storage facilities.
- Raw materials, including, but not limited to seed sludge, clean water for performance testing, chemicals and utilities during start-up and operation.
- Laboratory services, operating and maintenance personnel during equipment checkout, start-up operations.
- Disposal of initial start-up wastewater and chemicals.



REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies

A COMPANY

B

REV A

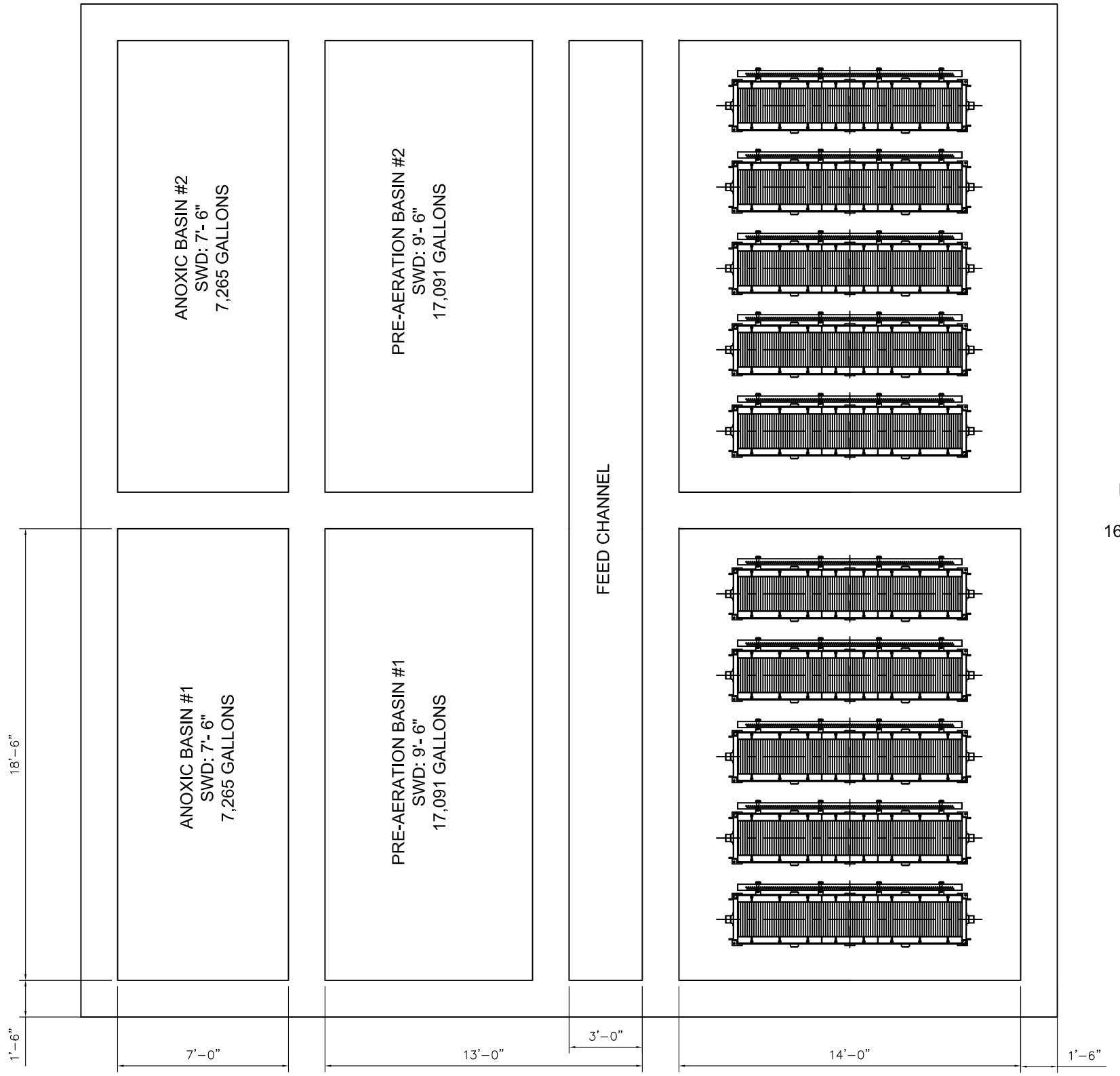
DATE	03-16-2009
DRAWN	EVM/KZ
CHECK'D	

HALF MOON BAY WWTP

HALF MOON BAY, CA

PROCESS FLOW DIAGRAM 0.25 MGD MMF (BUILD OUT)

DRAWING SCALE	NTS
JOB NUMBER	NONE
SHEET	G-1.1 OF 1
FILE NAME	REV



NOTE:
1) During Phase I (0.10 MGD AAF), one of the two trains will be operated. Four (4) ES-200 SMUs and one (1) diffuser case will be installed for Phase I;

2) During Phase II (0.25 MGD AAF), both trains will be operated. Each MBR basin will have five (5) ES-200 SMUs installed.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE	/	/	/	/
-	-	-	-	-

Enviroquip
a division of Eimco Water Technologies

A GLAV COMPANY

B

DATE	03/16/2009
DRAWN	KZ
CHECK'D	

HALF MOON BAY WWTP
HALF MOON BAY, CA
MBR BASIN LAYOUT
0.25 MGD (BUILD OUT)

DRAWING SCALE	
JOB NUMBER	-
SHEET	OF
FILE NAME	REV A

Enviroquip

a division of Eimco Water Technologies

2404 Rutland Dr., Suite 200
Austin, Texas 78758
phone: (512) 834-6000 | fax: (512) 834-6039

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.

Sheet Index

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

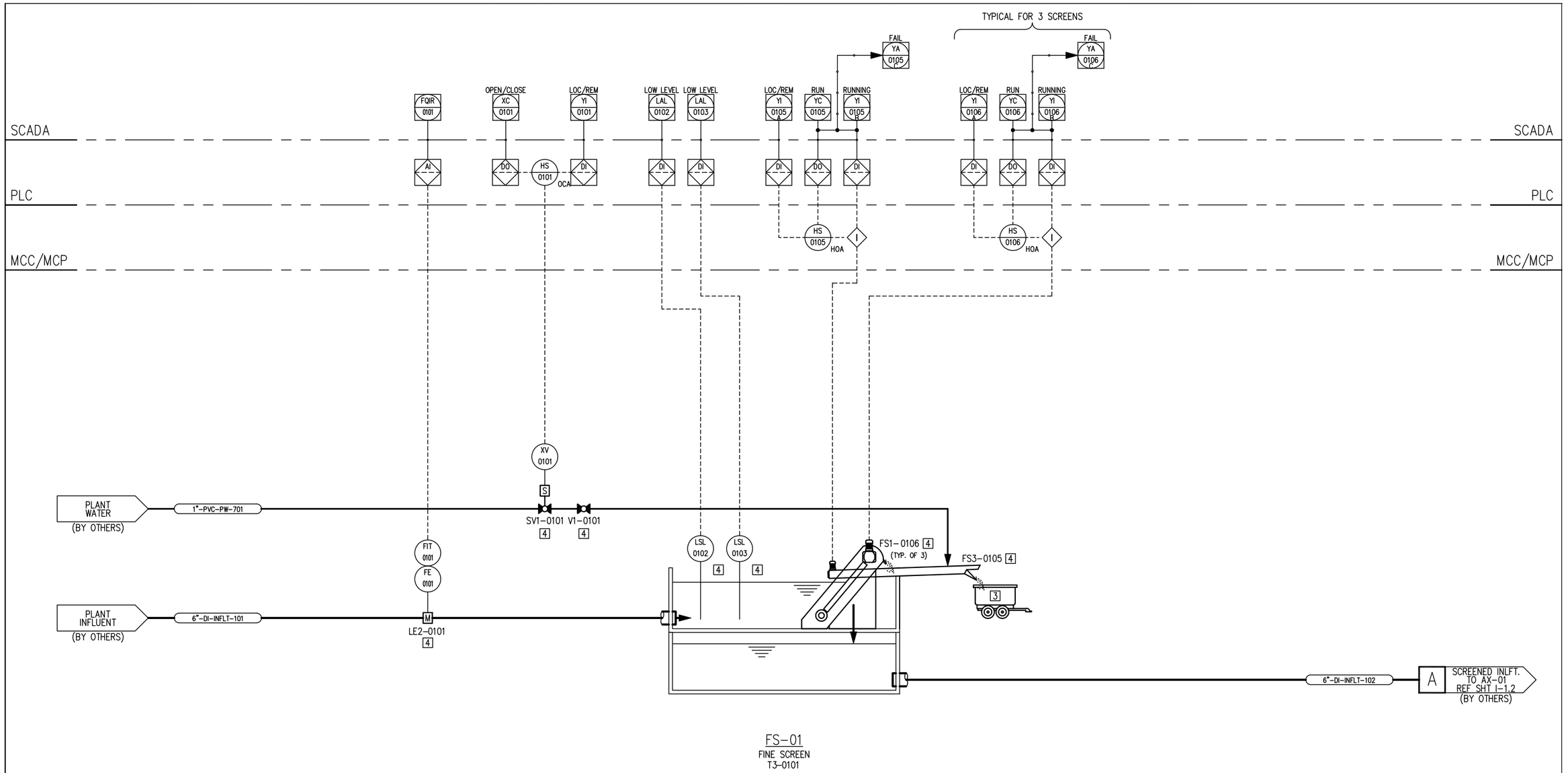
Enviroquip — a division of Eimco Water Technologies — A GLV COMPANY — B

REV A

DATE 3/20/09
DRAWN DEG
CHECK'D KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
COVER SHEET

DRAWING SCALE NONE
JOB NUMBER NONE
SHEET I-1.0 OF 13
FILE NAME HMCAUS
REV B



FS-01
FINE SCREEN
T3-0101

NOTES:

1. PIPING, FITTINGS AND ASSOCIATED HARDWARE SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
2. ALL MANUAL VALVES AND ASSOCIATED FITTINGS SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies
A CLAY COMPANY

B

REV A

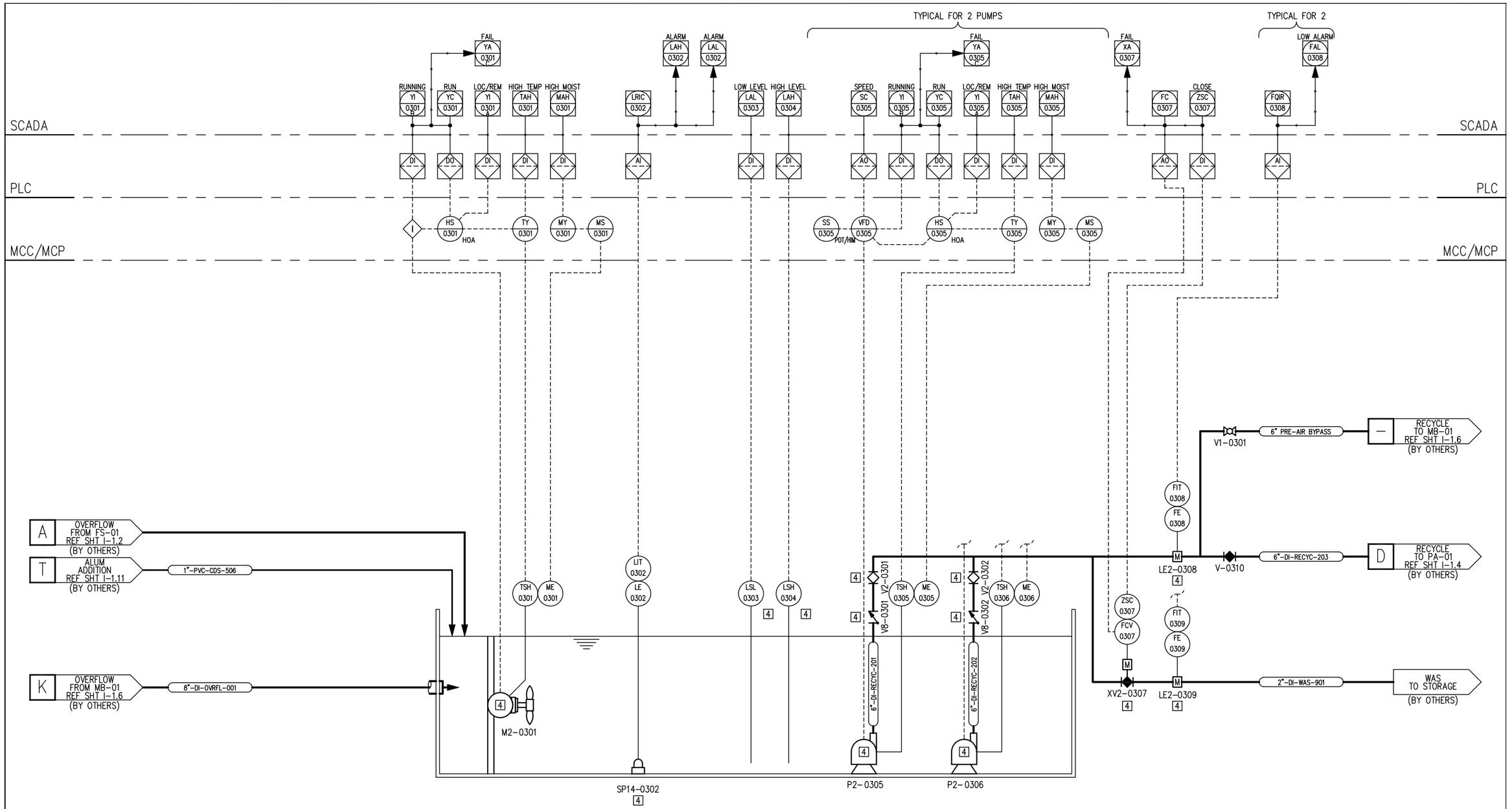
DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP

HALF MOON BAY, CA.

P&I D
FINE SCREENS

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.1 OF 13
FILE NAME	HMCAUS
REV	B



AX-01
ANOXIC BASIN
T1-0301

NOTES:
1. PIPING, FITTINGS AND ASSOCIATED HARDWARE SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
2. ALL MANUAL VALVES AND ASSOCIATED FITTINGS SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

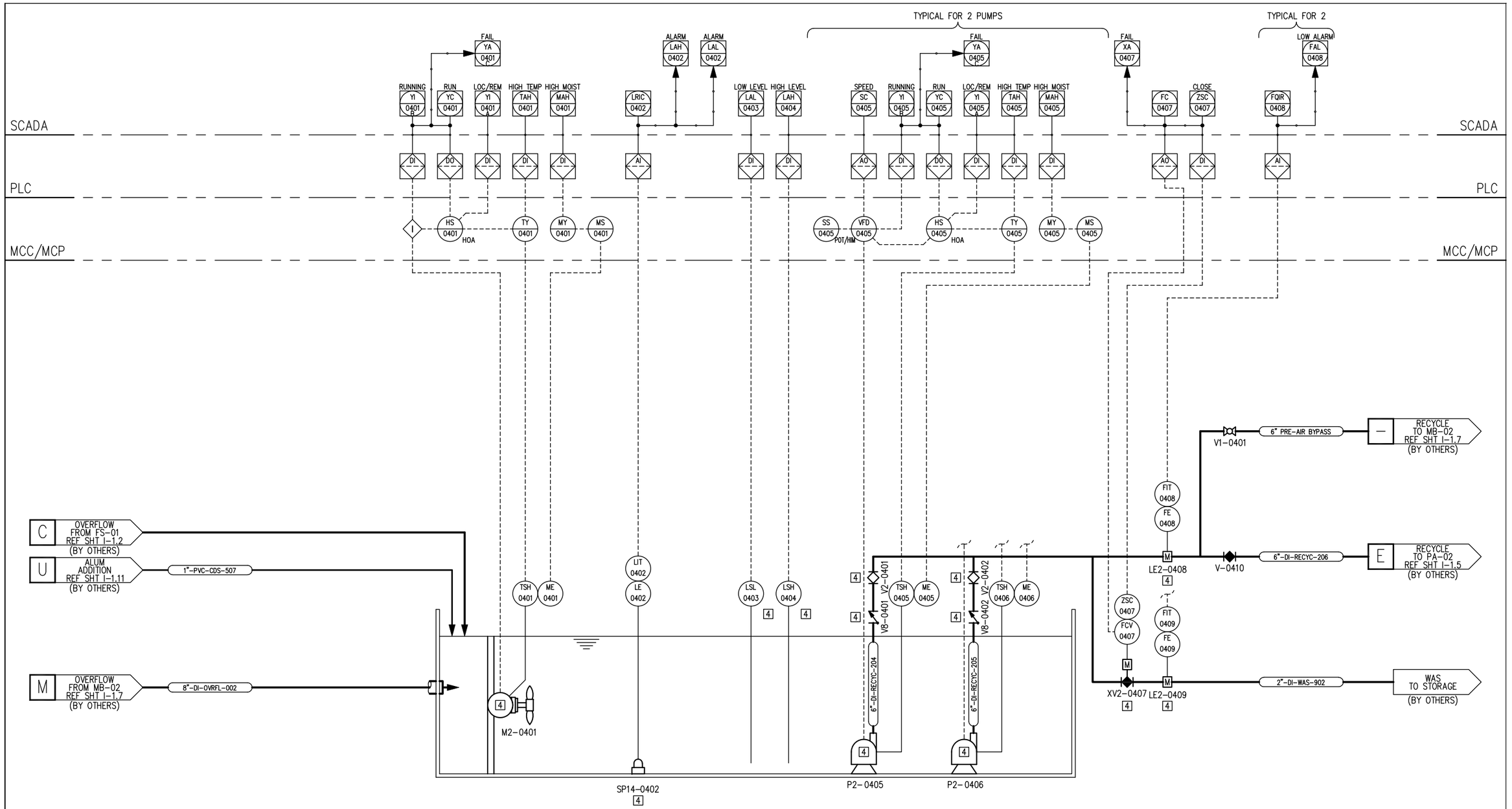
Enviroquip
a division of Eimco Water Technologies
A GLAV COMPANY
B

REV A

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
ANOXIC BASIN 01

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.2 OF 13
FILE NAME	HMCAUS
REV	B



AX-02
ANOXIC BASIN
T1-0401

NOTES:
1. PIPING, FITTINGS AND ASSOCIATED HARDWARE SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
2. ALL MANUAL VALVES AND ASSOCIATED FITTINGS SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

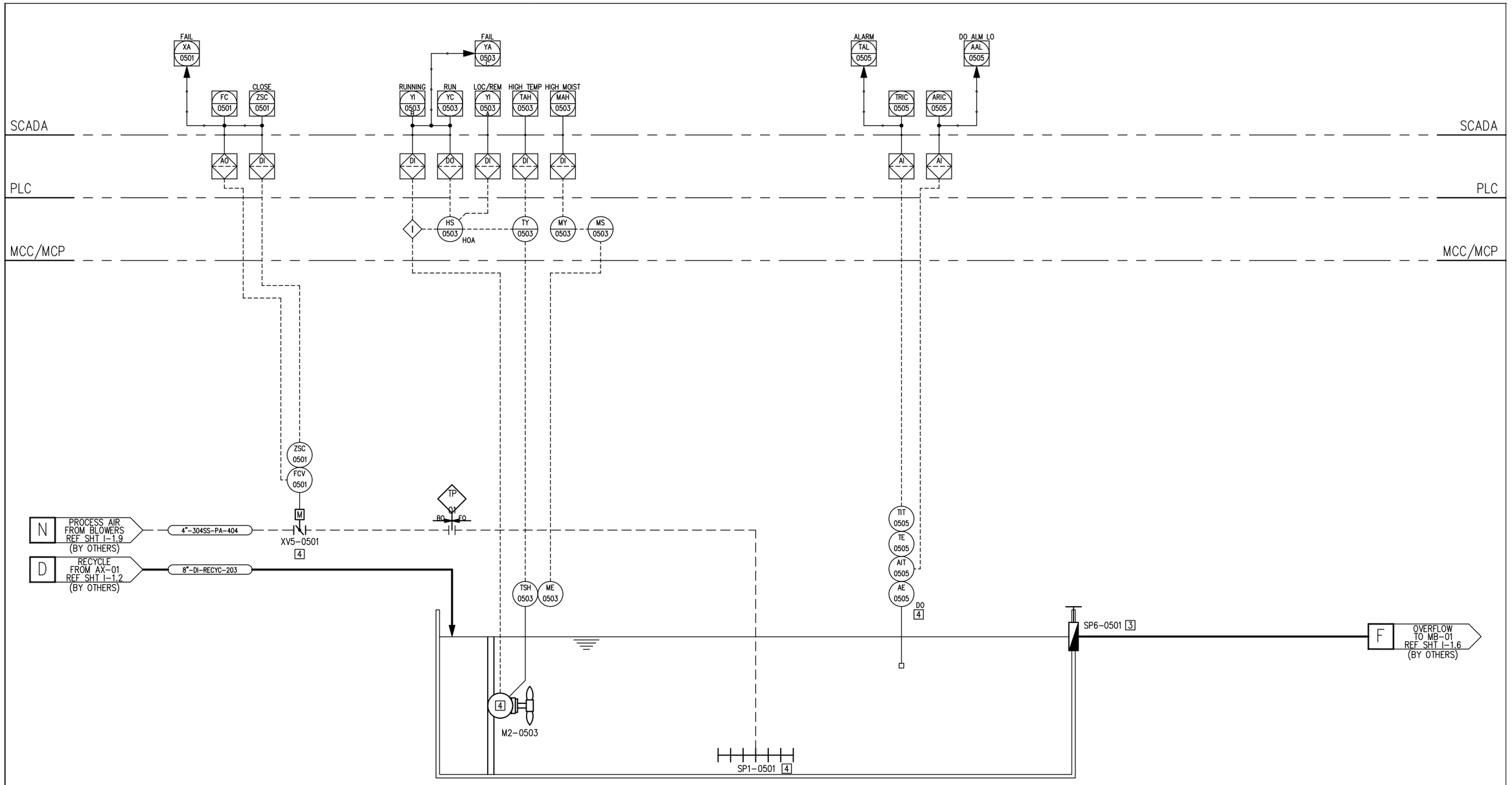
Enviroquip
a division of Eimco Water Technologies
A GLAV COMPANY
B

REV A

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
ANOXIC BASIN 02

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.3 OF 13
FILE NAME	HMCAUS
REV	B



PA-01
PRE-AERATION BASIN
T1-0501

NOTES:
1. PIPING, FITTINGS AND ASSOCIATED HARDWARE SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
2. ALL MANUAL VALVES AND ASSOCIATED FITTINGS SUPPLIED BY OTHERS UNLESS OTHERWISE NOTED.
3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

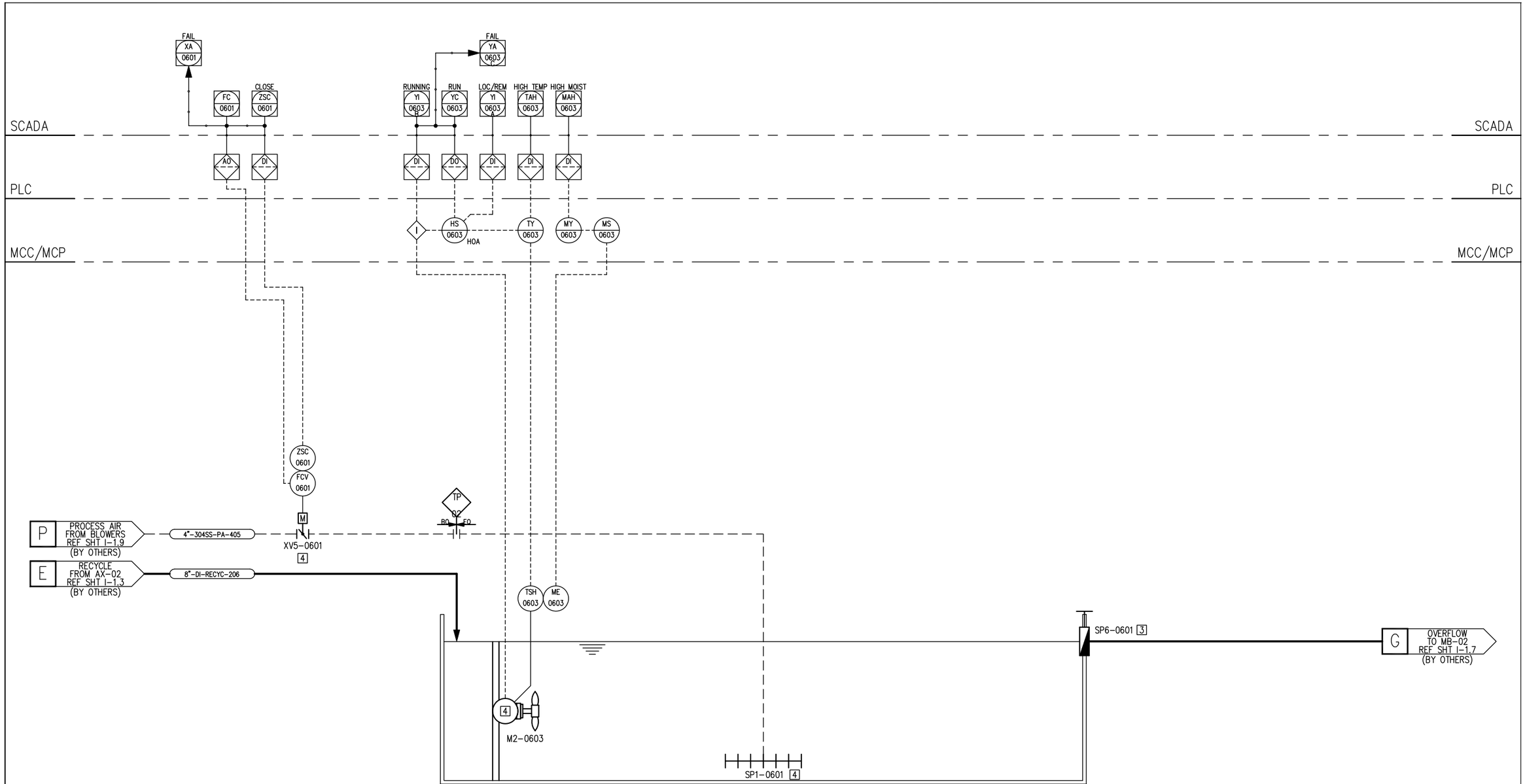
REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies
A GLAV COMPANY
B

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
PRE-AERATION BASIN 01

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.4 OF 13
FILE NAME	HMCAUS
REV	B



PA-02
PRE-AERATION BASIN
T1-0601

NOTES:
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3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

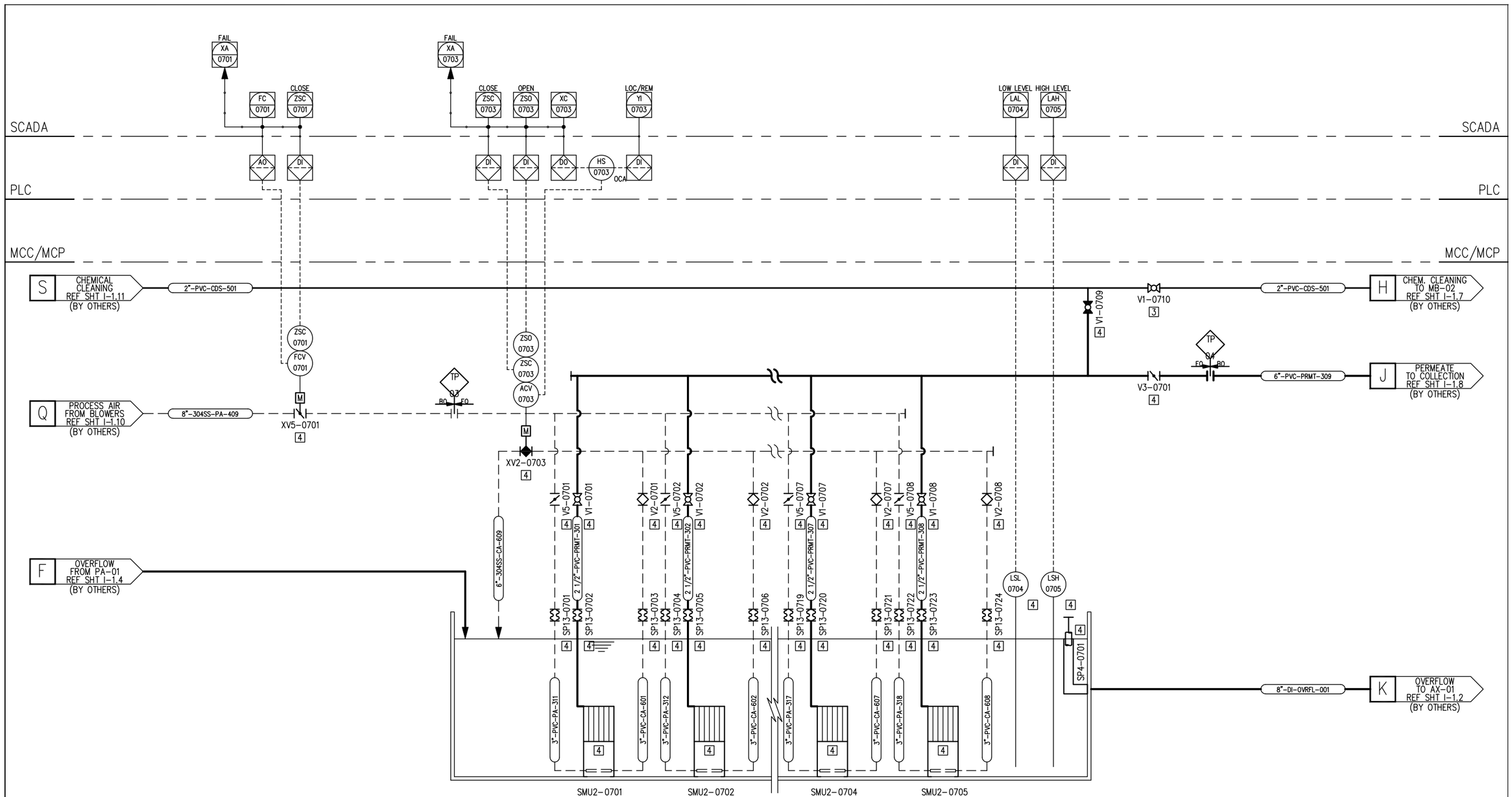
Enviroquip
a division of Eimco Water Technologies
A GLAV COMPANY
B

REV A

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
PRE-AERATION BASIN 02

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.5 OF 13
FILE NAME	HMCAUS
REV	B



MB-01
MEMBRANE BIOREACTOR BASIN
T1-0701

NOTES:
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3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

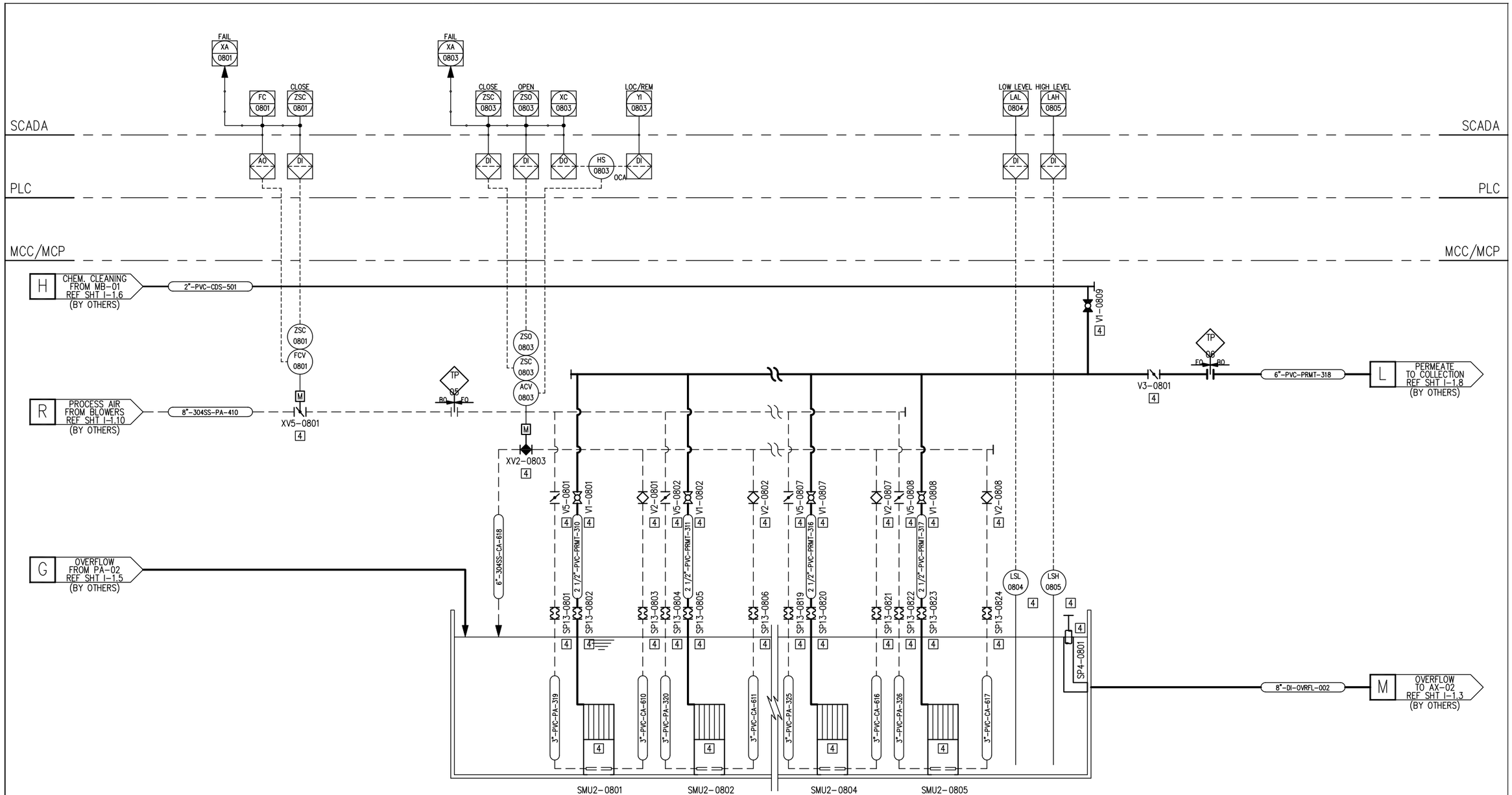
Enviroquip
a division of Eimco Water Technologies
A GLAV COMPANY
B

REV A

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
MEMBRANE BIOREACTOR BASIN 01

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.6 OF 13
FILE NAME	HMCAUS
REV	B



MB-02
MEMBRANE BIOREACTOR BASIN
T1-0601

NOTES:
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4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

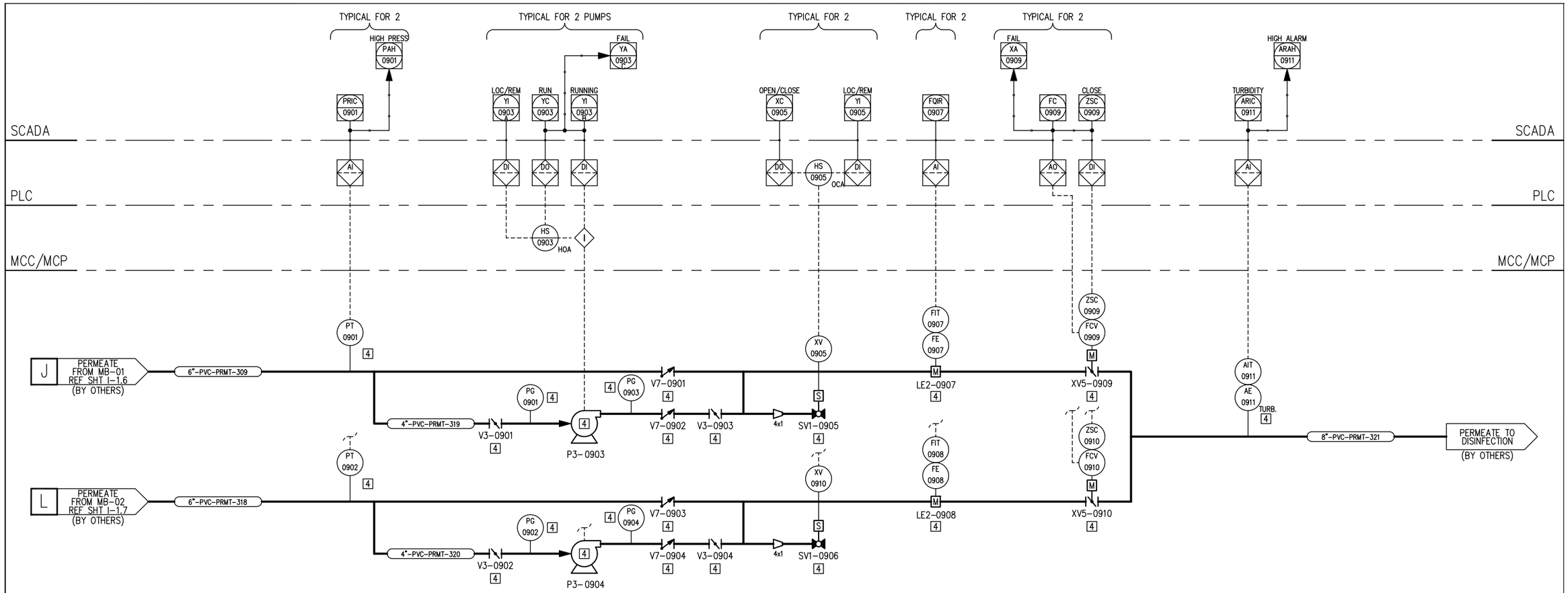
Enviroquip
a division of Eimco Water Technologies
A GLAV COMPANY
B

REV A

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
MEMBRANE BIOREACTOR BASIN 02

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.7 OF 13
FILE NAME	HMCAUS
REV	B



NOTES:

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4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies
A GLV COMPANY

B

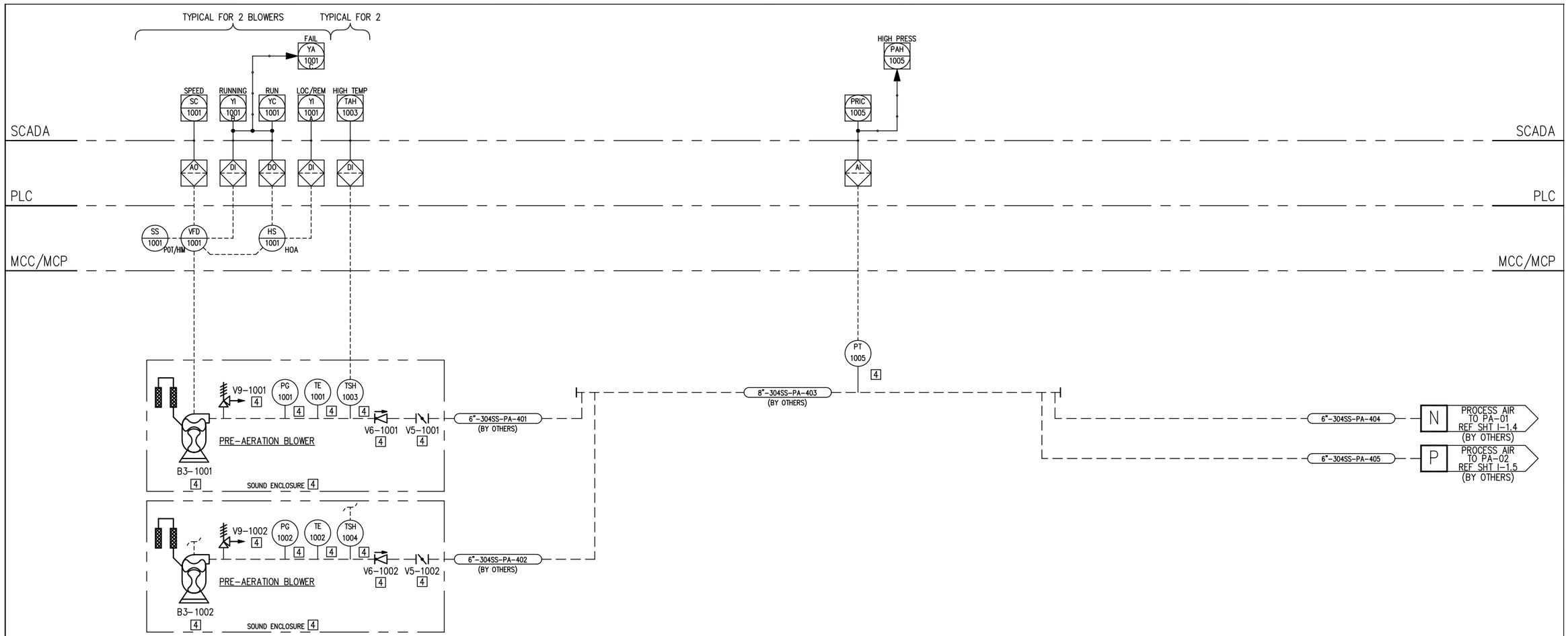
DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP

HALF MOON BAY, CA.

P&ID
PERMEATE COLLECTION

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.8 OF 13
FILE NAME	HMCAUS
REV	B



NOTES:

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4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies

A GLAV COMPANY

B

REV A

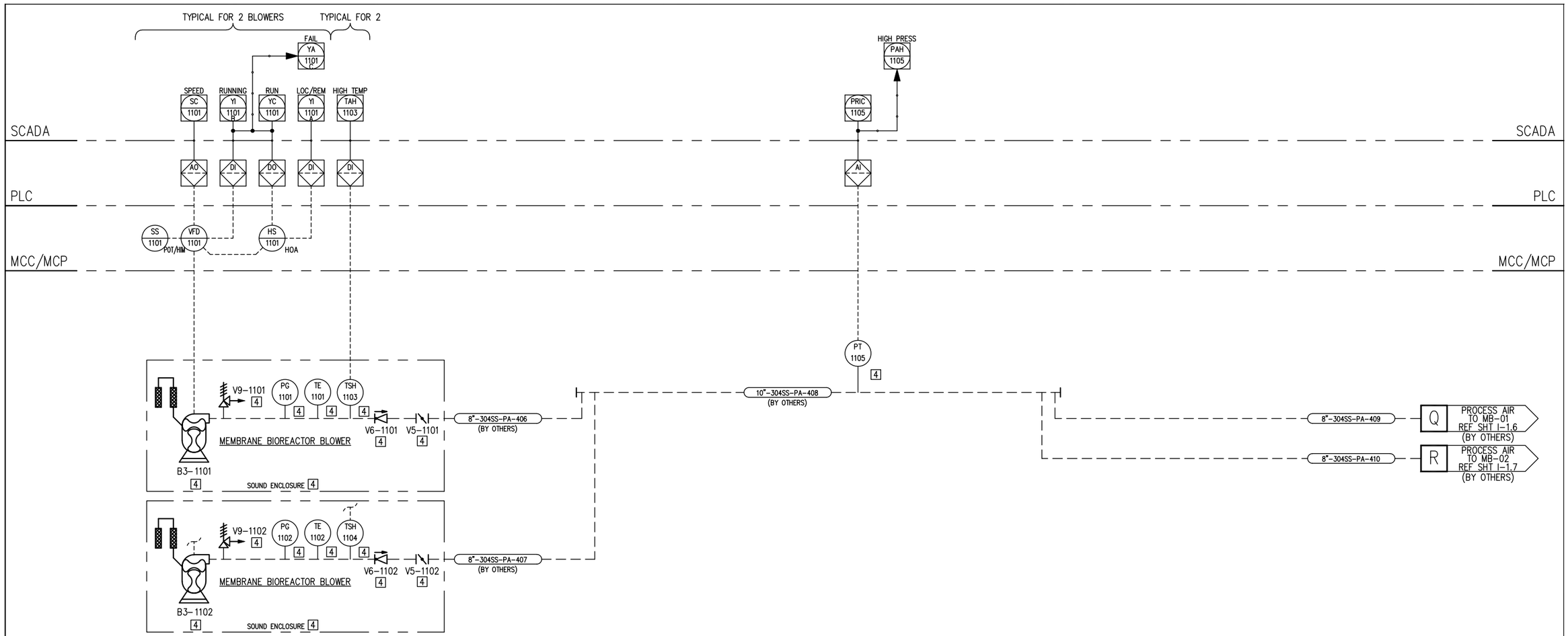
DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP

HALF MOON BAY, CA.

P&ID
PRE-AERATION BLOWERS

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.9 OF 13
FILE NAME	HMCAUS
REV	B



NOTES:

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3. SUPPLIED BY OTHERS.
4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies

A GLAV COMPANY

B

REV A

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

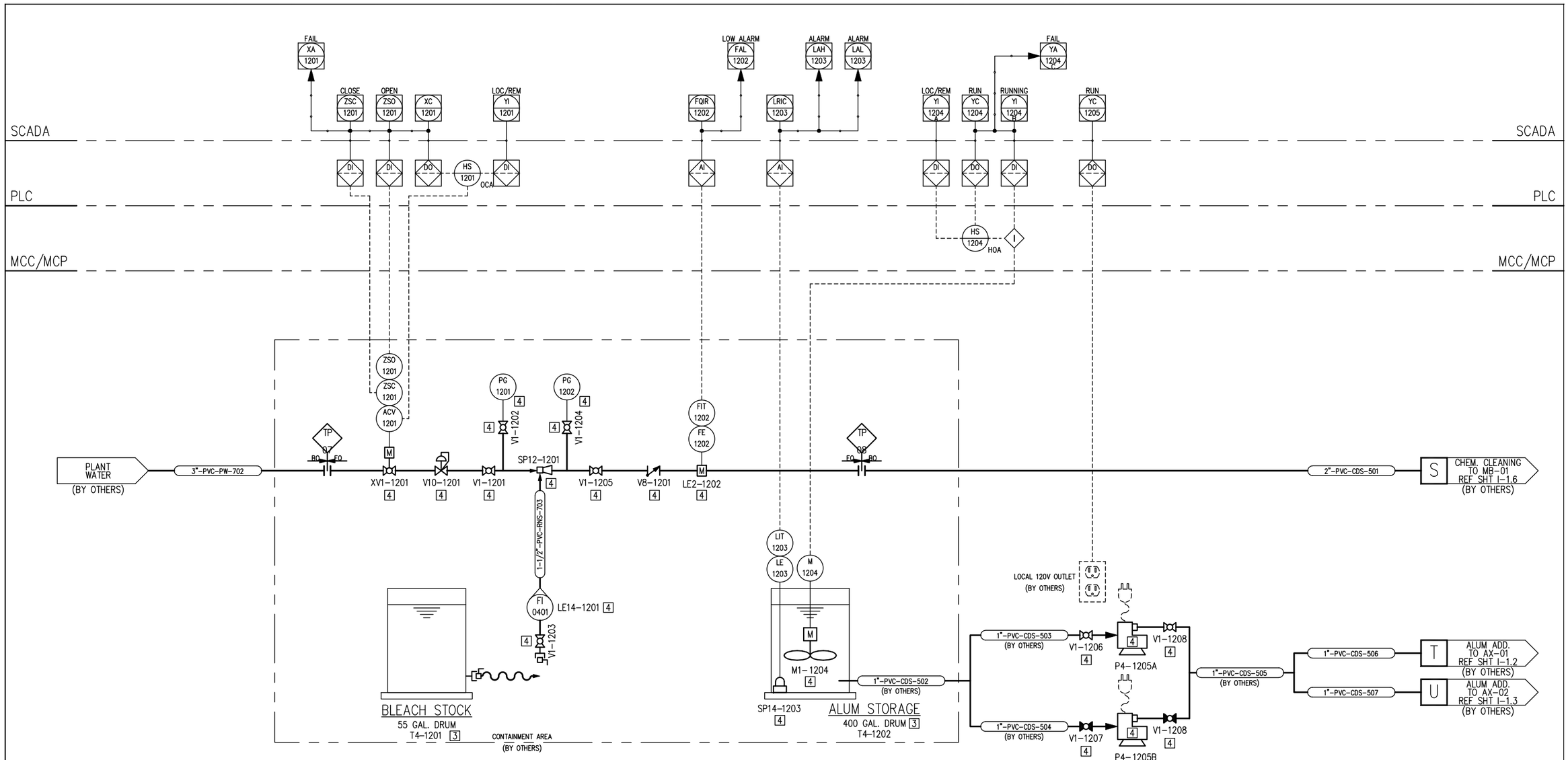
HALF MOON BAY 0.25 MGD WWTP

HALF MOON BAY, CA.

P&ID

MEMBRANE BIOREACTOR BLOWERS

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.10 OF 13
FILE NAME	HMCAUS
REV	B



NOTES:

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4. SUPPLIED BY ENVIROQUIP.
5. FUTURE.

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies

A GLV COMPANY

B

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP

HALF MOON BAY, CA.

P&ID
CHEMICAL CLEANING & ADDITION

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.11 OF 13
FILE NAME	HMCAUS
REV	B

TYPICAL VARIABLE LETTER COMBINATIONS

FIRST LETTERS	INITIATING OR MEASURED VARIABLE	CONTROLLERS				READOUT DEVICES		SWITCHES AND ALARM DEVICES			TRANSMITTERS			SOLENOIDS, RELAYS, COMPUTING DEVICES	PRIMARY ELEMENT	TEST POINT	WELL OR PROBE	VIEWING DEVICE, GLASS	SAFETY DEVICE	FINAL ELEMENT	SUCEEDING LETTERS	
		RECORDING	INDICATING	BLIND	SELF-ACTUATED CONTROL VALVES	RECORDING	INDICATING	HIGH	LOW	COMB	RECORDING	INDICATING	BLIND								VALUE	DESCRIPTION
A	Analysis	ARC	AIC	AC	–	AR	AI	ASH	ASL	ASHL	ART	AIT	AT	AY	AE	AP	AW	–	–	AZ	A	ALARM
B	Burner/Combustion	BRC	BIC	BC	–	BR	BI	BSH	BSL	BSHL	BRT	BIT	BT	BY	BE	–	BW	BG	–	BZ	B	–
C	User's Choice	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	C	CLOSED
D	User's Choice	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	D	–
E	Voltage	ERC	EIC	EC	–	ER	EI	ESH	ESL	ESHL	ERT	EIT	ET	EY	EE	–	–	–	–	EZ	E	–
F	Flow Rate	FRC	FIC	FC	FCV	FR	FI	FSH	FSL	FSHL	FRT	FIT	FT	FY	FE	FP	–	FG	–	FZ	F	–
FQ	Flow Quantity	FQRC	FQIC	–	–	FQR	FQI	FQSH	FQSL	FQSHL	–	FQIT	FQT	FQY	FQE	–	–	–	–	FQZ	–	–
FF	Flow Ratio	FFRC	FFIC	FFC	–	FFR	FFI	FFSH	FFSL	FFSHL	–	–	–	–	–	–	–	–	–	FFZ	–	–
G	User's Choice	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	G	–
H	Hand	–	HIC	HC	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	H	HIGH
I	Current	IRC	IIC	–	–	IR	II	ISH	ISL	ISHL	IRT	IIT	IT	IY	IE	–	–	–	–	IZ	HH	HIGH HIGH
J	Power	JRC	JIC	–	–	JR	JI	JSH	JSL	JSHL	JRT	JIT	JT	JY	JE	–	–	–	–	JZ	I	–
K	Time	KRC	KIC	KC	KCV	KR	KI	KSH	KSL	KSHL	KRT	KIT	KT	KY	KE	–	–	–	–	KZ	J	–
L	Level	LRC	LIC	LC	LCV	LR	LI	LSH	LSL	LSHL	LRT	LIT	LT	LY	LE	–	LW	LG	–	LZ	K	–
M	User's Choice	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	L	LOW
N	User's Choice	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	LL	LOW LOW
O	User's Choice	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	M	MIDDLE
P	Pressure/Vacuum	PRC	PIC	PC	PCV	PR	PI	PSH	PSL	PSHL	PRT	PIT	PT	PY	PE	PP	–	–	PSE	PZ	N	–
PD	Pressure Differential	PDRC	PDIC	PDC	PDCV	PDR	PDI	PDSH	PDSL	PDSHL	PDRT	PDIT	PDT	PDY	PDE	PDP	–	–	–	PDZ	O	OPEN
Q	Quantity	QRC	QIC	–	–	QR	QI	QSH	QSL	QSHL	QRT	QIT	QT	QY	QE	–	RW	–	–	QZ	P	–
R	Radiation	RRC	RIC	RC	–	RR	RI	RSH	RSL	RSHL	RRT	RIT	RT	RY	RE	–	–	–	–	RZ	Q	–
S	Speed/Frequency	SRC	SIC	SC	SCV	SR	SI	SSH	SSL	SSHL	SRT	SIT	ST	SY	SE	–	–	–	–	SZ	R	–
T	Temperature	TRC	TIC	TC	TCV	TR	TI	TSH	TSL	TSHL	TRT	TIT	TT	TY	TE	TP	TPW	–	TSE	TZ	S	–
TD	Temperature Differential	TDRC	TDIC	TDC	TDCV	TDR	TDI	TDSH	TDSL	TDSHL	TDRT	TDIT	TDT	TDY	TDE	TDP	TDPW	–	–	TDZ	T	–
U	Multivariable	–	–	–	–	UR	UI	–	–	–	–	–	–	–	–	–	–	–	–	–	U	–
V	Vibration/Machinery Analysis	–	–	–	–	VR	VI	VSH	VSL	VSHL	VRT	VIT	VT	VY	VE	–	–	–	–	VZ	V	–
W	Weight/Force	WRC	WIC	WC	WCV	WR	WI	WSH	WSL	WSHL	WRT	WIT	WT	WY	WE	–	–	–	–	WZ	W	–
WD	Weight/Force Differential	WDRC	WDIC	WDC	WDCV	WDR	WDI	WDSH	WDSL	WDSHL	WDRT	WDIT	WDT	WDY	WDE	–	–	–	–	WDZ	–	–
X	Unclassified	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–
Y	Event/State/Presence	–	YIC	YC	–	YR	YI	YSH	YSL	YSHL	YRT	YIT	YT	YY	YE	–	–	–	–	YZ	Y	–
Z	Position/Dimension	ZRC	ZIC	ZC	ZCV	ZR	ZI	ZSH	ZSL	ZSHL	ZRT	ZIT	ZT	ZY	ZE	–	–	–	–	ZZ	Z	–
ZD	Gauging/Deviation	ZDRC	ZDIC	ZDC	ZDCV	ZDR	ZDI	ZDSH	ZDSL	ZDSHL	ZDRT	ZDIT	ZDT	ZDY	ZDE	–	–	–	–	ZDZ	–	–

NOTE: This table is not all-inclusive.

LINE CODES

- MAJOR PROCESS LINE
- MINOR PROCESS LINE
- PROCESS/CLEANING AIR
- ELECTRICAL
- PLC TO SCADA COMMUNICATION
- DESCRIPTION 1 / DESCRIPTION 2 / REF SHT I-X.X — PROCESS CONTINUATION WITHIN SCOPE
- DESCRIPTION 1 / DESCRIPTION 2 / REF SHT I-X.X — PROCESS CONTINUATION WITHIN SCOPE WITH BACKFLOW
- DESCRIPTION 1 / DESCRIPTION 2 — PROCESS CONTINUATION OUT OF SCOPE
- DESCRIPTION 1 / DESCRIPTION 2 — PROCESS CONTINUATION OUT OF SCOPE WITH BACKFLOW
- 00"-XXXXX-XXX-000 — LINE NUMBER

LINE NUMBERING

00" – DI – INFLT – 001 (EXAMPLE)

- 001 — SEQUENTIAL LINE NO.
- INFLT — FLUID CODE
- DI — PIPE MATERIAL
- 00" — NOMINAL LINE SIZE

PIPE MATERIAL ABBRIVIATION

304SS	304 STAINLESS STEEL
DI	DUCTILE IRON
HDGCS	HOT DIPPED GALVANIZED CARBON STEEL
PVC	POLYVINYL CHLORIDE
FLEX	FLEXIBLE HOSE

FLUID CODE ABBREVIATION

CA	CLEANING AIR
CDS	CHEMICAL DOSING
INFLT	INFLUENT
OVRFL	OVERFLOW
PA	PLANT AIR
PRMT	PERMEATE
PW	PLANT WATER
RAS	RETURN ACTIVATED SLUDGE
RECYC	RECYCLE
RNS	RINSE
WAS	WASTE ACTIVATED SLUDGE

LINE NUMBER GROUPS

000	OVERFLOW
100	INFLUENT
200	RECYCLE
300	PERMEATE
400	PROCESS AIR
500	CHECMICAL DOSING
600	CLEANING AIR
700	PLANT WATER
800	RETURN ACTIVATED SLUDGE
900	WASTE ACTIVATED SLUDGE

INSTRUMENT NUMBERING

0000 (EXAMPLE)

- 00 — SHEET NO.
- 00 — SEQUENTIAL INSTRUMENT NO.

EQUIPMENT NUMBERING

XXX0 – 0000 (EXAMPLE)

- 0000 — SEQUENTIAL NUMBER
- 000 — P&ID PAGE NUMBER
- XXX — EQUIPMENT TYPE

BLOWER TYPES

B1	REGENERATIVE (RT BORA)
B2	REGENERATIVE (FPZ)
B3	PD (KAESER)
B4	PD (ROOTS)
B5	PD (TUTHILL)
B6	CENTRIFUGAL (CONTINENTIAL)
B7	CENTRIFUGAL (LAMSON)

SCREEN TYPES

FS1	AUTOMATIC FINE SCREEN
FS2	MANUAL FINE SCREEN
FS3	SCREENING CONVEYOR
FS4	GRIT CLASSIFIER

MIXER TYPES

M1	MIXER
M2	WALL MOUNTED MIXER

INLINE INSTRUMENT TYPES

LE1	NOZZLE
LE2	MAGNETIC ELEMENT
LE3	ORIFICE
LE4	VENTURI
LE5	PITOT
LE6	AVERAGING PITOT
LE7	VORTEX SHEDING
LE8	TURBINE
LE9	POSITIVE DISPLACEMENT
LE10	SONIC
LE11	TARGET
LE12	ROTAMETER
LE13	RESISTANCE TEMPERATURE DIFFERENTIAL
LE14	VARIABLE

MEMBRANE UNIT TYPES

SMU1	FS TYPE (SINGLE DECK) UNIT
SMU2	ES TYPE (SINGLE DECK) UNIT
SMU3	EM TYPE (SINGLE DECK) UNIT
SMU4	EK TYPE (DOUBLE DECK) UNIT
SMU5	EW TYPE (DOUBLE DECK) UNIT

TANK TYPES

T1	PRE-CAST CONCRETE
T2	BOLTED STEEL
T3	WELDED STEEL
T4	FIBERGLASS DRUM

SPECIALTY ITEMS

SP1	FINE BUBBLE
SP2	AIR DROP-TRANSMAX
SP3	AIR DROP-MS
SP4	TELESCOPING VALVE
SP5	WEIR
SP6	WEIR GATE
SP7	ULTRA SONIC LEVEL TRANSMITTER
SP8	SLOTTED PIPE SKIMMER
SP9	BASIN COVER
SP10	EQUIPMENT SKID
SP11	SPECTACLE BLIND
SP12	EDUCTOR
SP13	EXPANSION JOINT
SP14	SUBMERSIBLE PRESSURE SENSOR
SP15	DRAFT TUBE
SP16	MULTI-EDUCTOR DRAFT TUBE
SP17	TABLET CHLORINATOR

PUMP TYPES

P1	AIR LIFT PIMP
P2	SUBMERSIBLE PUMP
P3	CENTRIFUGAL PUMP
P4	METERING PUMP

REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies

A GLAV COMPANY

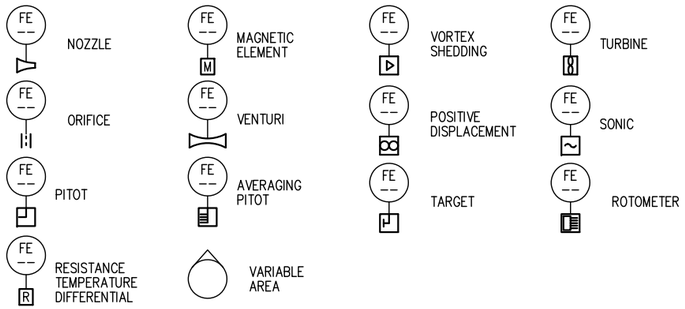
B

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP
HALF MOON BAY, CA.
P&ID
CODES LEGEND

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.12 OF 13
FILE NAME	HMCAUS
REV	B

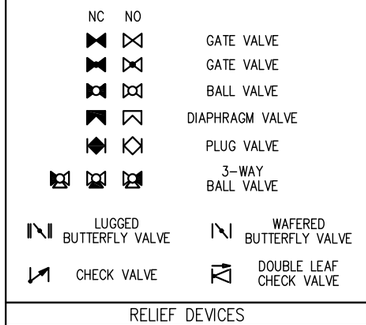
INLINE INSTRUMENTS



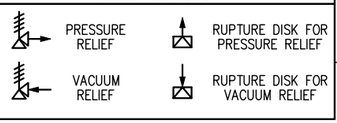
GENERAL INSTRUMENT OR FUNCTION SYMBOLS

	FIELD MOUNTED	PRIMARY LOCATION ACCESSIBLE TO OPERATOR	PRIMARY LOCATION INACCESSIBLE TO OPERATOR	AUXILIARY LOCATION ACCESSIBLE TO OPERATOR	HARDWARE INTERLOCK
DISCRETE INSTRUMENTS	○	⊖	⊖	⊖	◇I
SHARED DISPLAY SHARED CONTROL	○	⊖	⊖	⊖	DCS "SOFT" INTERLOCK
COMPUTER FUNCTION	⬡	⬡	⬡	⬡	◇I
PROGRAMMABLE LOGIC CONTROL	◇	◇	◇	◇	

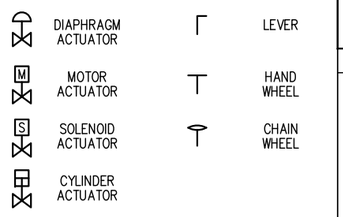
VALVE SYMBOLS



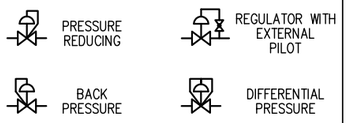
RELIEF DEVICES



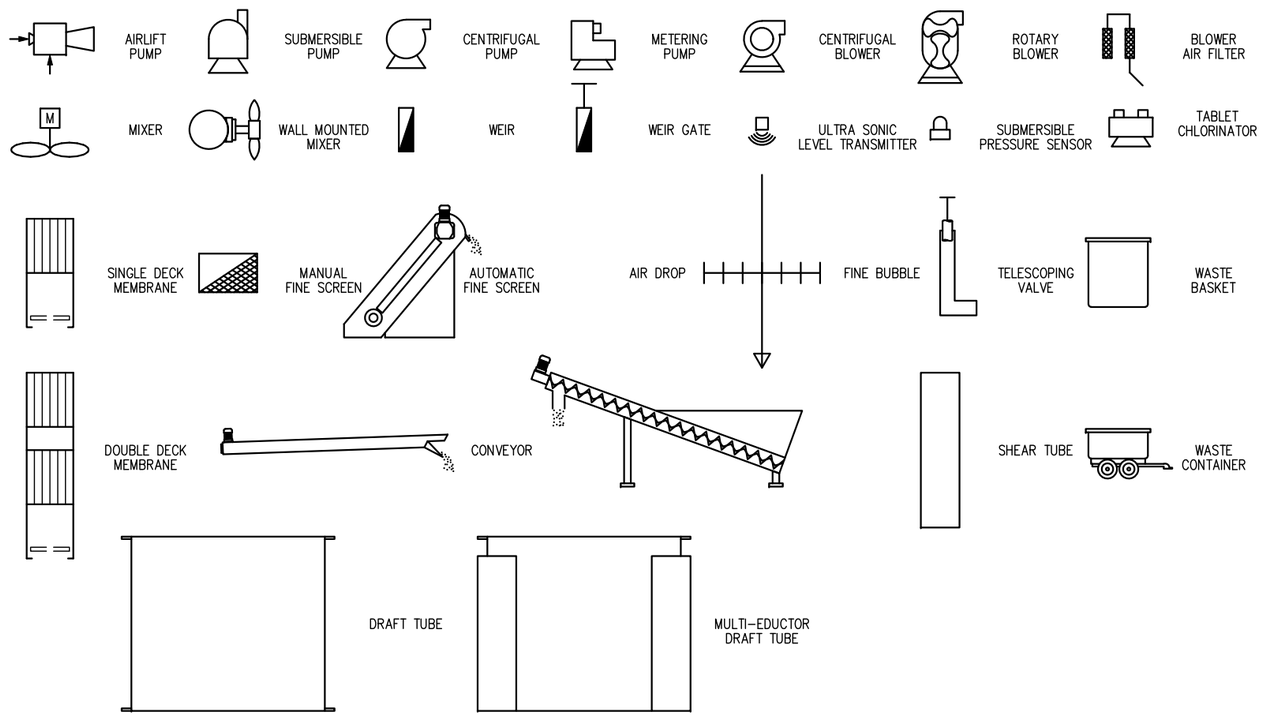
VALVE ACTUATORS



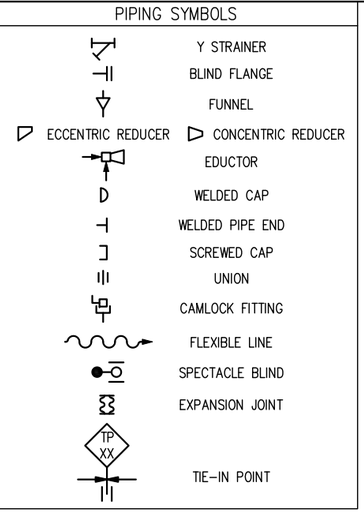
SELF-ACTING REGULATORS



MECHANICAL EQUIPMENT



PIPING SYMBOLS



REVISION	EN	BY	CHECK'D	DATE
INITIAL RELEASE				

Enviroquip
a division of Eimco Water Technologies

A GLAV COMPANY

B

DATE	3/20/09
DRAWN	DEG
CHECK'D	KZ

HALF MOON BAY 0.25 MGD WWTP

HALF MOON BAY, CA.

P&ID
SYMBOLS LEGEND

DRAWING SCALE	NONE
JOB NUMBER	NONE
SHEET	I-1.13 OF 13
FILE NAME	HMCAUS
REV	B

1. Price

Please refer to the cover letter for pricing of the attached scope of supply.

2. Payment Terms

Prices and estimated shipping dates are based upon the receipt of a purchase order within sixty (60) days from the date of this proposal. Prices quoted are firm for delivery within the time frame cited below. Prices and approval submittals/equipment shipping dates are subject to adjustment if a purchase order is not received within 60 days from the date of this proposal. Pricing is based on the following terms of payment:

Municipal

Invoice Date	Amount of Invoice
Upon Receipt of Approved Submittal:	10% of Total Price
Upon Receipt Equipment:	90% of Total Price
Before Startup of Equipment:	95% of Total Price
One month after Startup of Equipment:	100% of Total Price

All invoices are due and payable within thirty (30) days of the invoice date except 10% with Purchase order. Progress payments are required for partial shipments.

3. Price Escalation

The prices submitted are based upon Purchaser's acceptance of this proposal by May 24, 2009.

If the above indicated order date is exceed, prices and shipping dates are subject to review and adjustment. Should shipment dates be exceeded because of customer action, escalation of the selling prices at the rate of 1.5% per month for each month or partial month of delay will be applied. This escalation will be applied only if shipment is delayed by the customer.

In addition, due to fluctuating material costs, the prices quoted in this proposal may be adjusted at the time of delivery. **Only additional unit material costs will be transferred to the purchaser.**

4.Taxes

Federal, State or local sales, use or other taxes applicable to this transaction shall be added to the sales price for BUYER's account.

5. Backcharges

In no event shall Purchaser/Owner do or cause to be done any work, purchase any services or material or incur any expense for the account of ENVIROQUIP, nor shall ENVIROQUIP be responsible for such work or expense until after Purchaser/Owner has provided ENVIROQUIP's PROJECT MANAGER full details (including estimate of material cost and amount and rate of labor required) of the work, services, material or expenses and ENVIROQUIP has approved the same in writing. ENVIROQUIP will not accept Products returned by Purchaser/Owner unless ENVIROQUIP has previously accepted the return in writing and provided Purchaser/Owner with shipping instructions.

6. Freight

All prices are quoted with freight allowed to readily accessible location nearest to jobsite.

7. Warranty

Warranty and service policies are limited to equipment supplied by ENVIROQUIP Equipment that is not integral to ENVIROQUIP equipment will be subject to warranty and service policies of the respective manufacturer.

8. Ordering

All purchase orders tendered on the basis of this proposal shall be issued with statements clearly indicating what line items are being purchased, the cost of each line item to be purchased, and the total sell price of all items being purchased. In addition, any special instructions including shipping address, special or partial shipments, and shipment dates shall be clearly identified. All purchase orders shall be sent to:

Attention: Kimberly Mathis
ENVIROQUIP
2404 Rutland Drive, Suite 200
Austin, Texas 78758
Phone: (512) 834-6000 Fax: (512) 834-6039

All correspondence dealing with this project and all payments made for equipment based on this offering should be mailed to the same address. In the event that a purchase order is issued to ENVIROQUIP, this proposal including the "*Terms and Conditions*," "*General Terms and Conditions of Sale*," and "*Clarifications*" shall be made essential parts of the purchase order. Any order submitted to ENVIROQUIP shall be subject to acknowledgement and acceptance by ENVIROQUIP

9. Liability and Ownership

Transfer of liability from ENVIROQUIP to OWNER occurs upon delivery to shipping address. Transfer of ownership occurs after the full purchase price has been paid. ENVIROQUIP retains title and right of repossession to the equipment until the full purchase price has been paid. OWNER or BUYER shall not encumber nor permit others to encumber said equipment by any liens or security instruments until the full purchase price has been paid.

10. Past Due Accounts

Payment of invoices shall be in compliance with the "*Pricing Terms and Conditions*" of this proposal. Amounts past due are subject to a service charge of 2.0 percent per month.

11. Approval of Equipment and Drawing Submittal

Detailed equipment and drawing submittals shall be shipped six (6) to eight (8) weeks after ENVIROQUIP acceptance of purchase order.

ENVIROQUIP shall use reasonable efforts to meet the dates specified above for shipment of Approval Submittals, but such dates are estimates provided only to serve as a guide to the OWNER, and not guaranteed. No liability, direct or indirect, is assumed by ENVIROQUIP for failure to ship on such dates.

12. Shipment

Shipment will be made eighteen (18) weeks to twenty (20) weeks after ENVIROQUIP receives a copy of OWNER-approved approval submittals. Erection drawings and

operating and maintenance instructions shall be forwarded at time of shipment of equipment.

ENVIROQUIP shall use reasonable efforts to meet the dates specified above for shipment of Equipment, but such dates are estimates provided only to serve as a guide to the OWNER, and not guaranteed. No liability, direct or indirect, is assumed by ENVIROQUIP for failure to ship on such dates.

13. Acceptance

Should shipment of equipment be delayed because of unreasonable delays in approval of submittals or at the request of the OWNER beyond nine (9) months after date of purchase order, the selling price shall escalate at the rate of 1.0 percent per month.

OWNER shall pay for acceptance of partial shipments and proper billings of ENVIROQUIP even if the OWNER does not pay the BUYER, provided the reason for such non-payment by the OWNER is unrelated to the performance of ENVIROQUIP Unauthorized retention of payments by the BUYER for any reason shall be subject to a service charge of 2% per month.

Upon receiving equipment, OWNER shall thoroughly inspect and properly store each shipping item in accordance with submittal requirements. Any items marked as shipped on the Bill of Material that are missing or damaged shall be brought to the attention of ENVIROQUIP within fourteen (14) days.

The OWNER shall notify the freight company of any crates, boxes, or equipment damaged in transit. ENVIROQUIP shall not be responsible for any damaged or missing items not confirmed in writing by the OWNER within fourteen (14) days from the shipping date. Any replacement of equipment and material after this time shall be invoiced.

14. Field Service

ENVIROQUIP shall provide the service of our Field Service Representative to inspect the installed equipment and to instruct the OWNER's personnel in its operation. A specific number of man-days are shown in our proposal. No reimbursement to the contractor shall be allowed for unused man-days or trips. Warranty of equipment may be affected or voided if the contractor does not allow time necessary to provide field service by ENVIROQUIP's Field Service Representative.

The BUYER shall have all of the equipment ready for operation prior to requesting service by our Field Service Representative. If the equipment is not ready for operation and field checkout when ENVIROQUIP's Field Service Representative arrives at the jobsite, ENVIROQUIP shall bill any delays beyond the scheduled amount indicated above. Billing shall be at the current field service rates plus incurred travel and living expenses.

Adequate notice, generally two (2) weeks, shall be given when scheduling our Field Service Representative. ENVIROQUIP's field service and startup of the equipment shall not commence until all subsequent conditions have been met in accordance with the "*Pricing Terms & Conditions*" of this proposal.

Enviroquip

a division of Eimco Water Technologies

Terms & Conditions of Sale

1. ACCEPTANCE. The proposal of the **Enviroquip division of EIMCO WATER TECHNOLOGIES, LLC** ("SELLER"), as well as these terms and conditions of sale (collectively the "Agreement"), constitutes SELLER's contractual offer of goods and associated services, and PURCHASER's acceptance of this offer is expressly limited to the terms of the Agreement. The scope and terms and conditions of the Agreement represent the entire offer by SELLER and supersede all prior solicitations, discussions, agreements, understandings and representations between the parties. Any scope or terms and conditions included in PURCHASER's acceptance/purchase order that are in addition to or different from the Agreement are hereby rejected.

2. DELIVERY. Any statements relating to the date of shipment of the Products (as defined below) represent SELLER'S best estimate, but is not guaranteed, and SELLER shall not be liable for any damages due to late delivery. The Products shall be delivered to the delivery point or points in accordance with the delivery terms stated in SELLER's proposal. If such delivery is prevented or postponed by reason of Force Majeure (as defined below), SELLER shall be entitled at its option to tender delivery to PURCHASER at the point or points of manufacture, and in default of PURCHASER's acceptance of delivery to cause the Products to be stored at such a point or points of manufacture at PURCHASER'S expense. Such tender, if accepted, or such storage, shall constitute delivery for all purposes of this agreement. If shipment is postponed at request of PURCHASER, or due to delay in receipt of shipping instructions, payment of the purchase price shall be due on notice from SELLER that the Products are ready for shipment. Handling, moving, storage, insurance and other charges thereafter incurred by SELLER with respect to the Products shall be for the account of PURCHASER and shall be paid by PURCHASER when invoiced.

3. TITLE AND RISK OF LOSS. SELLER shall retain the fullest right, title, and interest in the Products to the extent permitted by applicable law, including a security interest in the Products, until the full purchase price has been paid to SELLER. The giving and accepting of drafts, notes and/or trade acceptances to evidence the payments due shall not constitute or be construed as payment so as to pass SELLER's interests until said drafts, notes and/or trade acceptances are paid in full. Risk of loss shall pass to PURCHASER at the delivery point.

4. PAYMENT TERMS. SELLER reserves the right to ship the Products and be paid for such on a pro rata basis, as shipped. If payments are not made by the due date, interest at a rate of two percent (2%) per month, calculated daily, shall apply from the due date for payment. PURCHASER is liable to pay SELLER'S legal fees and all other expenses in respect of enforcing or attempting to enforce any of SELLER'S rights relating to a breach or threatened breach of the payment terms by PURCHASER. .

5. TAXES. Unless otherwise specifically provided in SELLER's quotation/proposal; PURCHASER shall pay and/or reimburse SELLER, in addition to the price, for all sales, use and other taxes, excises and charges which SELLER may pay or be required to pay to any government directly or indirectly in connection with the production, sale, transportation, and/or use by SELLER or PURCHASER, of any of the Products or services dealt with herein (whether the same maybe regarded as personal or real property). PURCHASER agrees to pay all property and other taxes which may be levied, assessed or charged against or upon any of the Products on or after the date of actual shipment, or placing into storage for PURCHASER'S account.

6. MECHANICAL WARRANTY. Solely for the benefit of PURCHASER, SELLER warrants that new equipment and parts manufactured by it and provided to PURCHASER (collectively, "Products") shall be free from defects in material and workmanship. The warranty period shall be twelve (12) months from startup of the equipment not to exceed eighteen (18) months from shipment. If any of SELLER'S Products fail to comply with the foregoing warranty, SELLER shall repair or replace free of charge to PURCHASER, EX WORKS SELLER'S FACTORIES or other location that SELLER designates, any Product or parts thereof returned to SELLER, which examination shall show to have failed under normal use and service operation by PURCHASER within the Warranty Period; provided, that if it would be impracticable for the Product or part thereof to be returned to SELLER, SELLER will send a representative to PURCHASER's job site to inspect the Product. If it is determined after inspection that SELLER is liable under this warranty to repair or replace the Product or part thereof, SELLER shall bear the transportation costs of (a) returning the Product to SELLER for inspection or sending its representative to the job site and (b) returning the repaired or replaced Products to PURCHASER; however, if it is determined after inspection that SELLER is not liable under this warranty, PURCHASER shall pay those costs. For SELLER to be liable with respect to this warranty, PURCHASER must make its claims to SELLER with respect to this warranty in writing no later than thirty (30) days after the date PURCHASER discovers the basis for its warranty claim and in no event more than thirty (30) days after the expiration of the Warranty Period. In addition to any other limitation or disclaimer with respect to this warranty, SELLER shall have no liability with respect to any of the following: (i) failure of the Products, or damages to them, due to PURCHASER's negligence or willful misconduct, abuse or improper storage, installation, application or maintenance (as specified in any manuals or written instructions that SELLER provides to the PURCHASER); (ii) any Products that have been altered or repaired in any way without SELLER'S prior written authorization; (iii) The costs of dismantling and reinstallation of the Products; (iv) any Products damaged while in transit or otherwise by accident; (v) decomposition of Products by chemical action, erosion or corrosion or wear to Products or due to conditions of temperature, moisture and dirt; or (vi) claims with respect to parts that are consumable and normally replaced during maintenance such as filter media, filter drainage belts and the like, except where such parts are not performing to SELLER'S estimate of normal service life, in which case, SELLER shall only be liable for the pro rata cost of replacement of those parts based on SELLER'S estimate of what the remaining service life of those parts should have been; provided, that failure of those parts did not result from any of the matters listed in clauses (i) through (v) above. With regard to third-party parts, equipment, accessories or components not of SELLER's design, SELLER'S liability shall be limited solely to the assignment of available third-party warranties. **THE PARTIES AGREE THAT ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHETHER WRITTEN, ORAL OR STATUTORY, ARE EXCLUDED TO THE FULLEST EXTENT PERMISSIBLE BY LAW.** All warranties and obligations of SELLER shall terminate if PURCHASER fails to perform its obligations under this Agreement including but not limited to any failure to pay any charges due to SELLER. SELLER'S quoted price for the Products is based upon this warranty. Any increase in warranty obligation may be subject to an increase in price.

7. CONFIDENTIAL INFORMATION. All nonpublic information and data furnished to PURCHASER hereunder, including but not limited to price, size, type and design of the Products is the sole property of SELLER and submitted for PURCHASER'S own confidential use solely in connection with this Agreement and is not to be made known or available to any third party without SELLER'S prior written consent.

8. PAINTING. The Products shall be painted in accordance with SELLER'S standard practice, and purchased items such as motors, controls, speed reducers, pumps, etc., will be painted in accordance with manufacturers' standard practices, unless otherwise agreed in writing.

9. DRAWINGS AND TECHNICAL DOCUMENTATION. When PURCHASER requests approval of drawings before commencement of manufacture, shipment may be delayed if approved drawings are not returned to SELLER within fourteen (14) days of receipt by PURCHASER of such drawings for approval. SELLER will furnish only general arrangement, general assembly, and if required, wiring diagrams, erection drawings, installation and operation-maintenance manuals for SELLER'S equipment (in English language). SELLER will supply six (6) complete sets of drawings and operating instructions. Additional sets will be paid for by PURCHASER. Electronic files, if requested from SELLER, will be provided in *pdf, jpg or tif* format only.

10. SET OFF. This agreement shall be completely independent of all other contracts between the parties and all payments due to SELLER hereunder shall be paid when due and shall not be setoff or applied against any money due or claimed to be due from SELLER to PURCHASER on account of any other transaction or claim.

11. SOFTWARE. PURCHASER shall have a nonexclusive and nontransferable license to use any information processing program supplied by SELLER with the Products. PURCHASER acknowledges that such programs and the information contained therein is Confidential Information and agrees: a) not to copy or duplicate the program except for archival or security purposes; b) not to use the program on any computer other than the computer with which it is supplied; and c) to limit access to the program to those of its employees who are necessary to permit authorized use of the program. PURCHASER agrees to execute and be bound by the terms of any software license applicable to the Products supplied.

12. PATENT INDEMNITY. SELLER will defend at its own expense any suit instituted against PURCHASER based upon claims that SELLER's Product hereunder in and of itself constitutes an infringement of any valid apparatus claims of any United States patent issued and existing as of the date of this Agreement, if notified promptly in writing and given all information, assistance, and sole authority to defend and settle the same, and SELLER shall indemnify the PURCHASER against such claims of infringement. Furthermore, in case the use of the Products is enjoined in such suit or in case SELLER otherwise deems it advisable, SELLER shall, at its own expense and discretion, (a) procure for the PURCHASER the right to continue using the Products, (b) replace the same with non-infringing Products, (c) modify the Product so it becomes non-infringing, or (d) remove the Products and refund the purchase price less freight charges and depreciation. SELLER shall not be liable for, and PURCHASER shall indemnify SELLER for, any claim of infringement related to (a) the use of the Products for any purpose other than that for which it was furnished by SELLER, (b) compliance with equipment designs not furnished by SELLER or (c) use of the Products in combination with any other equipment. The foregoing states the sole liability of SELLER for patent infringement with respect to the Products

13. GENERAL INDEMNITY. Subject to the rights, obligations and limitations of liabilities of the parties set forth in this Agreement, PURCHASER shall protect and indemnify SELLER, its ultimate parent, its ultimate parent's subsidiaries and each of their respective officers, directors, employees and agents, from and against all claims, demands and causes of action asserted by any entity to the extent of PURCHASER's negligence or willful misconduct in connection with this Agreement.

14. DEFAULT, TERMINATION. In the event that PURCHASER becomes insolvent, commits an act of bankruptcy or defaults in the performance of any term or condition of this Agreement, the entire unpaid portion of the purchase price shall, without notice or demand, become immediately due and payable. SELLER at its option, without notice or demand, shall be entitled to sue for said balance and for reasonable legal fees, plus out-of-pocket expenses and interest; and/or to enter any place where the Products are located and to take immediate possession of and remove the Products, with or without legal process; and/or retain all payments made as compensation for the use of the Products: and/or resell the Products, without notice or demand, for and on behalf of the PURCHASER, and to apply the net proceeds from such sale (after deduction from the sale price of all expenses of such sale and all expenses of retaking possession, repairs necessary to put the Products in saleable condition, storage charges, taxes, liens, collection and legal fees and all other expenses in connection therewith) to the balance then due to SELLER for the Products and to receive from the PURCHASER the deficiency between such net proceeds of sale and such balance. PURCHASER hereby waives all trespass, damage and claims resulting from any such entry, repossession, removal, retention, repair, alteration and sale. The remedies provided in this paragraph are in addition to and not limitations of any other rights of SELLER.

15. CANCELLATION. PURCHASER may terminate this Agreement for convenience upon giving SELLER (30) days prior written notice of such fact and paying SELLER for all costs and expenses (including overhead) incurred by it in performing its work and closing out the same plus a reasonable profit thereon. All such costs and expenses shall be paid to SELLER within ten (10) days of the termination of the Agreement, or be subject to an additional late payment penalty of five percent (5%) of the total amount of costs and expenses owed.

16. REMEDIES. The rights and remedies of the PURCHASER in connection with the goods and services provided by SELLER hereunder are exclusive and limited to the rights and remedies expressly stated in this Agreement.

17. INSPECTION. PURCHASER is entitled to make reasonable inspection of Products at SELLER's facility. SELLER reserves the right to determine the reasonableness of the request and to select an appropriate time for such inspection. All costs of inspections not expressly included as an itemized part of the quoted price of the Products in the Agreement shall be paid by PURCHASER.

18. WAIVER. Any failure by SELLER to enforce PURCHASER's strict performance of any provision of this Agreement will not constitute a waiver of its right to subsequently enforce such provision or any other provision of this Agreement.

19. COMPLIANCE WITH LAWS. If applicable laws, ordinances, regulations or conditions require anything different from, or in addition to, that called for by this Agreement, SELLER will satisfy such requirements at PURCHASER'S written request and expense.

20. FORCE MAJEURE. If SELLER is rendered unable, wholly or in material part, by reason of Force Majeure to carry out any of its obligations hereunder, then on SELLER's notice in writing to PURCHASER within a reasonable time after the occurrence of the cause relied upon, such obligations shall be suspended. "Force Majeure" shall include, but not be limited to, acts of God, laws and regulations, strikes, civil disobedience or unrest, lightning, fire, flood, washout, storm, communication lines failure, delays of the PURCHASER or PURCHASER's subcontractors, breakage or accident to equipment or machinery, wars, police actions, terrorism, embargos, and any other causes that are not reasonably within the control of the SELLER. If the delay is the result of PURCHASER's action or inaction, then in addition to an adjustment in time, SELLER shall be entitled to reimbursement of costs incurred to maintain its schedule.

21. INDEPENDENT CONTRACTOR. It is expressly understood that SELLER is an independent contractor, and that neither SELLER nor its principals, partners, parents, subsidiaries, affiliates, employees or subcontractors are servants, agents, partners, joint ventures or employees of PURCHASER in any way whatsoever.

22. SEVERABILITY. Should any portion of this Agreement, be held to be invalid or unenforceable under applicable law then the validity of the remaining portions thereof shall not be affected by such invalidity or unenforceability and shall remain in full force and effect. Furthermore, any invalid or unenforceable provision shall be modified accordingly within the confines of applicable law, giving maximum permissible effect to the parties' intentions expressed herein.

23. CHOICE OF LAW, CHOICE OF VENUE. This Agreement shall be governed and construed in accordance with the laws of the State of Utah, without regard to its rules regarding conflicts or choice of law. The parties submit to the jurisdiction and venue of the state and federal courts located in Salt Lake City, Utah.

24. ASSIGNMENT. PURCHASER shall not assign or transfer this agreement without the prior written consent of the SELLER. Any attempt to make such an assignment or transfer shall be null and void. SELLER shall have the authority to assign, or otherwise transfer, its rights and obligations in connection with this Agreement, in whole or in part, upon prior written notice to PURCHASER.

25. LIMITATION ON LIABILITY. TO THE EXTENT PERMISSIBLE BY LAW, SELLER SHALL HAVE NO FURTHER LIABILITY IN CONNECTION WITH THIS AGREEMENT IN EXCESS OF THE COST OF CORRECTING ANY DEFECTS, OR IN THE ABSENCE OF ANY DEFECT, IN EXCESS OF THE VALUE OF THE PRODUCTS SOLD HEREUNDER. NOTWITHSTANDING ANY LIABILITIES OR RESPONSIBILITIES ASSUMED BY SELLER HEREUNDER, SELLER SHALL IN NO EVENT BE RESPONSIBLE TO PURCHASER OR ANY THIRD PARTY, WHETHER ARISING UNDER CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR OTHERWISE, FOR LOSS OF ANTICIPATED PROFITS, LOSS BY REASON OF PLANT SHUTDOWN, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, SERVICE INTERRUPTIONS, COST OF PURCHASED OR REPLACEMENT POWER, COST OF MONEY, LOSS OF USE OF CAPITAL OR REVENUE OR ANY OTHER INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL LOSS OR DAMAGE, WHETHER ARISING FROM DEFECTS, DELAY, OR FROM ANY OTHER CAUSE WHATSOEVER.

III. CORRECTIONS AND ADDITIONS TO THE DRAFT EIR
C. ENVIRONMENTAL ANALYSIS

INTRODUCTION

The changes to the proposed development project described in Section III.A (Changes to the Project Description) and DEIR text changes described in Section III.B (Revisions to the Draft EIR) are evaluated below to determine whether they would result in a new significant impact or increase the severity of previously disclosed impacts of the project. Staff has determined that the changes would not result in additional significant environmental impacts not addressed in the Draft EIR or increase the severity of previously identified environmental impacts. Therefore, no new mitigation measures are required. Minor changes resulting in little to no environmental impact are not included in this section as environmental impacts from these minor changes are negligible.

AESTHETICS

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and may extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). The visual signs of construction (e.g., construction fencing, vehicles, flag men) will be present, in reduced volumes, for up to 20 years. However, as one building would be finished and the construction site cleared before the next building is initiated, there would be greater visual signs of progress and order to the site compared to disturbance of the entire site over a shorter period of time. Impacts continue to be less than significant.

Revised Wellness Center Site Plan: The new site plan reduces the Wellness Center building square footage from 98,785 to 70,348 square feet and the total building footprint by 4%. The public storage building, which was proposed to be housed in a separate two-story building at the northern end of the AO Zone along Airport Street, has been reduced from 20,000 square feet to 10,000 square feet and relocated within a Wellness Center building on the southern end of the site, adjacent to warehouse existing buildings. The wetlands trail on this site has been eliminated. The elimination of structures in the archaeological site area, the elimination of the separate two-story storage building, and improved clustering of the Wellness Center with adjoining development to the south result in reduced visual impacts from Airport Street (Views 1 and 2 of the DEIR) and from the Mavericks Parking Lot (View 3). Project impacts to aesthetic resources, as mitigated, remain less than significant.

2-Foot Increase in the Wellness Center First Floor Elevations: First floor elevations of Wellness Center Buildings have been raised from 18 feet to 20 feet National Geodetic Vertical Datum (NGVD), which is above the estimated maximum elevations when accounting for a 100-year flood event, sea level rise and the peak tsunami inundation. This change has been accompanied by a reduction in the vertical size of the buildings, so that their height above natural grade remain the same as described by the DEIR. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Impacts of Landscape Buffers and Drip Irrigation: Increased planting of wetlands trees and shrubs in accordance with the Planting Plans in the 90% Design Wetlands Restoration Report will provide additional visual screening of the project. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The area of the permeable trail would be increased from 14,000 square feet to 17,000 square feet due to an increase in its width from eight to ten feet. The trail would allow for multiple-purpose uses, including pedestrians and bicycles, and would continue to resemble a sidewalk. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Anti-Glare, Anti-Reflective Surface to be Used on Solar Panels: An anti-glare, anti-reflective surface would be used on all solar panels in order to minimize glare and reflection from the panels. This change in the project description would not reduce the efficiency of the solar panels and would minimize project-related glare and reflectivity. Project impacts to aesthetic resources, as mitigated, remain less than significant.

Replace Single Membrane Bioreactor (MBR) System with Multiple MBR System: The three smaller MBR plants, which will be buried, will allow for phased construction and will be less visible than the large single MBR plant. Total building square footages will remain the same. Project impacts to aesthetic resources, as mitigated, remain less than significant.

AGRICULTURE RESOURCES

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Under these scenarios, only a portion of the site would be developed at a time, allowing the remaining portions to remain under cultivation. Therefore, project impacts to agricultural resources, which are less than significant, are likely to be further reduced under scenarios contemplating longer construction periods.

AIR QUALITY

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Exhaust emissions (i.e., fugitive dust) from engine-powered equipment would be reduced under these scenarios. Mitigation Measure AQ-2 of the DEIR requires implementation of a dust control program that would further reduce this impact. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

Elimination of Wellness Center "Community Center": The fitness center will not be available to the surrounding community but only for Wellness Center residents, guests and staff and employees of the Office Park. Limiting use of the fitness center reduces the number of traffic trips estimated for the Wellness Center by 215 trips, from 384 to 169 trips. Therefore, total project trips have been so reduced

from 2,123 trips to 1,908 trips. The reduction in trips are local and do not impact the intersections at Highways 1 and 92. Reduced traffic impacts will result in corresponding reduced air quality impacts from vehicle emissions. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

Elimination of Natural Gas for Heating and Building Operations Due to Solar Power: Natural gas would be used for backup purposes only. Therefore, area source emissions associated with regular natural gas usage in the residences and offices would be reduced from levels described in the DEIR. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

Replace Single MBR System with Multiple MBR System: As stated in Section II.B, the DEIR described MBR plants as containing internal combustion equipment that would impact air quality. However, the plants do not, as proposed, contain internal combustion equipment and therefore would not result in significant air quality impacts. Therefore, project impacts to air quality, which are less than significant with mitigation, are likely to be further reduced.

BIOLOGICAL RESOURCES

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Only a portion of the site would be developed at a time, allowing the remaining portions to remain in an undeveloped state, thereby reducing impacts to wildlife foraging and movement. Also, wetlands restoration would not be completed all at once but would be phased, allowing for a more gradual transition. Instead of a shorter exposure to louder noise levels from construction, these scenarios would involve exposure to lower noise levels occurring at four separate points within the potential 20-year timeframe. Mitigation measures requiring exclusion fencing and surveys would still be implemented. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Revised Wellness Center Site Plan: The new site plan reduces the Wellness Center building square footage from 98,785 to 70,348 square feet and the total building footprint by 4%. The fire trail would be removed from the wetlands buffer, further reducing the impacts to habitat. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Replacement of Septic Drainfields with Title 22-Treated Wastewater Disposal to Granada Sanitary District (GSD) System and Replacement of Rain Gardens with Infiltration to Pervious Surface Parking Lots: Impacts discussed in the DEIR related to treated wastewater disposal through drainfields and stormwater drainage to wetlands via rain gardens, including potential groundwater and surface water contamination, have been further reduced. Instead of flowing to rain gardens located within the restored wetland areas, rainwater from surface and roof gutters will be infiltrated in the pervious surface parking lot. There will be no sub-surface disposal of treated wastewater, with the exception of minimal runoff of treated wastewater used for surface and solar panel washing, as allowed by CDPH and RWQCB. All excess treated recycled water not used by toilet flushing, irrigation, and washing uses will be directed to

the GSD system, using sewer capacity (8 EDUs) which has already been assessed to the property by GSD. A condition of approval of the project would require the applicant to secure such a connection from the GSD. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Impacts of Landscape Buffers and Drip Irrigation: Additional wetland habitat will replace non-habitat landscaping described in the DEIR. Provision of additional habitat will extend wildlife foraging areas on-site and provide for additional plant species diversity in non-wetland areas of the sites. Therefore, project impacts to biological resources, which are less than significant with mitigation, are likely to be further reduced.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The area of the permeable trail would be increased from 14,000 square feet to 17,000 square feet. The trail would allow for multiple purpose uses including pedestrians and bicycles and would continue to resemble a sidewalk. The widening of the sidewalk would only minimally add to the project footprint. Project impacts to biological resources, as mitigated, remain less than significant.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: To comply with Mitigation Measures GEO-1 through 8, the applicant provides the following additional information: 1) the project will utilize a drilled-pier supported foundation of interlocking grade beams; 2) the Final Geotechnical Report will include Cone Penetration Tests (CPTs) specifically located at the final foundation locations to determine the size, length and number of the piers required to support the buildings, limiting settlement to values allowed by the building code; 3) all utilities shall be constructed of materials that will withstand site settlement without rupture, as described in the DEIR; 4) all connections of utilities to the buildings will be with flexible connections designed to accommodate the differential settlement described in the DEIR; 5) all expansive surface soils will be removed under the permeable concrete pavement parking lot and replaced with permeable soils or gravel in accordance with Mitigation Measure GEO-7; 6) the thickness of the gravel layer under the Office Park parking lot will be approximately 12 inches, and 7) the drilled pier foundation system and permeable soil/gravel base for the parking lot will be located within the existing building footprints and areas of disturbance. There is no additional information regarding these below-ground systems that identifies anything that would result in additional biological impacts from those discussed in the DEIR. Project impacts to biological resources, as mitigated, remain less than significant. Topical Response 10, Final Geotechnical Report, of the FEIR includes further discussion of the potential impacts of geological mitigation measures.

CULTURAL RESOURCES

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios. The project, as revised, would avoid the cultural site. Mitigation measures to reduce impacts to human remains and paleontological resources would also be implemented under the extended construction timeframe scenarios. Project impacts to cultural resources, as mitigated, remain less than significant.

Revised Wellness Center Site Plan: The purpose of the redesign is to comply with Mitigation Measures CULT-2; therefore, impacts to cultural resources remain less than significant.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: The drilled pier foundation system and permeable soil/gravel base for the parking lot will be located within the existing building footprints and areas of disturbance. However, additional below-ground disturbance has the potential to uncover cultural resources. This potential impact is mitigated by existing cultural mitigation measures. Project impacts to cultural resources, as mitigated, remain less than significant.

GEOLOGY AND SOILS

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Only a portion of the site would be developed at a time, allowing the remaining portions to remain in an undeveloped state, thereby reducing potential impacts related to soil erosion and construction of impervious surface (including pervious parking lot). The levels of potential impact related to geological hazards remain the same under the extended construction scenarios.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: To comply with Mitigation Measures GEO-1 through 8, the project will utilize a drilled-pier supported foundation of interlocking grade beams. The Final Geotechnical Report will include CPTs specifically located at the final foundation locations to determine the size, length and number of the piers required to support the buildings, limiting settlement to code allowed values. All utilities shall be constructed of materials that will withstand the site settlement as described in the DEIR without rupture. All connections of utilities to the buildings will be with flexible connections designed to accommodate the differential settlement described in the DEIR. Expansive and impermeable surface soils will be removed under the permeable concrete pavement and replaced with permeable soils or gravel in accordance with Mitigation Measure GEO-7. The thickness of the gravel layer under the Office Park parking lot will be approximately 12 inches. All permeable pavements will be constructed with concrete pavers with adequate gravel separation to insure infiltration. All drainage will be diverted away from the structures. Subdrains will be installed to divert water away from the structures. The purpose of providing this additional information is to comply with Mitigation Measures GEO-1 through 8; therefore, project impacts to geology and soils remain less than significant, as mitigated.

HAZARDS AND HAZARDOUS MATERIALS

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). While use of hazardous materials during construction would be reduced with lower levels of use occurring at separate points over a period up to 20 years, there would be more instances of use over a period up to 20 years. Therefore, risks related to the transport, use, disposal, and accidental release of hazardous materials during construction would be similar to the

proposed project. Construction traffic would be reduced under this scenario and spread out over an extended period of time lasting up to 20 years, thereby reducing impacts related to interference with an emergency response plan or evacuation plan. The levels of potential impact related to airport and wildfire hazards remain the same under these scenarios.

Elimination of Natural Gas for Heating and Building Operations Due to Solar Power: Natural gas would be used for backup purposes only. Less than significant levels of impacts, as discussed in the DEIR, would be further reduced.

Replace Single MBR System with Multiple MBR System: The water treatment systems will be designed with the same design criteria described in the DEIR but a separate system is provided for each individual owner in the Office Park and operated under contract by the Wellness Center. While the same amount of bleach or acids for cleaning the MBR system would be required, transport of such materials within the site may increase. However, as discussed in the DEIR, any upset (spill) would be limited in the area of impact and could be remediated following standard spill response procedures. Furthermore, full compliance with OSHA mandatory compliance safety plans, as well as other applicable federal, state, and local laws, regulations and programs related to the routine transport, use, and disposal of hazardous materials in the workplace would ensure that impacts resulting from the routine transport, use, and disposal of hazardous materials associated with the operation of the proposed project would not result in a significant hazard to human health and/or the environment. Therefore, hazardous material impacts associated with operation of the smaller, separate MBR plants on-site would be less than significant and no mitigation measures are required.

Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): Mitigation Measure HAZ-3 requires, prior to approval of final development plans, an avigation easement to be granted by the property owner for the project site, in a form satisfactory to the County Director of Public Works. The mitigation measure requires the avigation easement to be recorded and shown on the vesting tentative map. Without implementation of Mitigation Measure HAZ-3, Impact HAZ-3 on page IV.G-25 states that the project would result in a less than significant impact associated with airport safety hazards to people residing or working in the area of a public airport. The mitigation measure does not reduce potential hazard impact, but is a disclosure tool that ensues the ongoing viability of airport operations, notwithstanding the proposed residential uses, in that, through the recordation of the easement, the property owner grants a right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity. Text additions improve the effect of this disclosure tool by acknowledging the value of the Half Moon Bay Airport to the residents of this County and require the Wellness Center resident(s) unable or unwilling to tolerate airport noise as permitted by the avigation easement to be relocated rather than to impose changes on airport operations.

HYDROLOGY AND WATER QUALITY

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Only a portion of the site would be developed at a time, allowing the remaining portions to remain in an undeveloped state, thereby reducing potential impacts

related to drainage and runoff. The levels of potential impact related to waste discharge, groundwater, and flooding remain the same under these scenarios.

Revised Wellness Center Site Plan: The new site plan reduces the total Wellness Center building square footage from 98,785 to 94,762 square feet. However, overall footprint will remain generally the same. The fire trail will be removed from the wetlands buffer further reducing the impacts to habitat. Therefore, project impacts to hydrology and water quality, which are less than significant with mitigation, are likely to be further reduced.

Changes to Grading Estimates for the Wellness Center: Grading estimates have changed due to the proposed under-building water storage tank for fire supply and the increase in the Wellness Center building pads by 2 feet to accommodate first floor elevations of 20 feet (formerly 18-feet). As shown in New Table III-9 of Section II of the FEIR, overall grading and gravel importation has decreased due the reduction in the size of the Wellness Center and a slight reduction in the total size of the pervious pavement on the Office Park site (per Environmental Health Division well setback requirements). Therefore, the impacts of grading to water quality, which are less than significant with mitigation, are likely to be further reduced.

Replacement of Septic Drainfields with Title 22 Treated Wastewater Disposal to Granada Sanitary District (GSD) System and Replacement of Rain Gardens with Infiltration to Pervious Surface Parking Lots: Impacts discussed in the DEIR related to treated wastewater disposal in drainfields and surface runoff drainage to wetlands via rain gardens, including potential groundwater and surface water contamination, have been further reduced.

Instead of flowing to rain gardens located within the restored wetland areas, rainwater from surfaces and roof gutters will be infiltrated in the pervious surface parking lot. On page IV.H-55, Table IV.H-7, the hydrology analyses of the DEIR concluded that the project would result in an 80% increase in storm water discharge from existing site conditions. This conclusion is based on analysis contained in the Technical Memorandum #1 provided in Appendix H of the DEIR. The 80% increase in surface flow is attributed to the creation of impervious area from building construction on the project sites and direction of roof runoff to rain gardens in the wetlands. Table 4 shows that the Wellness Center proposal would result in an increase in impervious developed area of 1.2 acres (the roof area of the proposed buildings per Table IV.H-5 of the DEIR). Table 4 shows that the Office Park proposal would result in an increase in impervious developed area of 1.8 acres (the roof area of the office buildings per Table IV.H-4 of the DEIR). Therefore, the increase in imperviousness, and hence the 80% increase in runoff described in the DEIR, is based solely on building roof runoff.

Project drainage is revised to direct all of the roof runoff through a perforated 6-inch pipe to an infiltration system located in trenches below the parking lot infiltration system sized for a 10-year storm. Likewise, all surface water in the parking lot would be absorbed into the permeable pavers and infiltrate into the same system. The project as described in the FEIR proposes to infiltrate all storm drainage. Based on the proposed method of infiltrating surface water runoff from rooftops and parking areas, the project will not increase storm runoff and surface flows from existing conditions.

There will be no sub-surface disposal of wastewater, with the exception of minimal runoff of treated wastewater used for surface and solar panel washing, as allowed by CDPH and RWQCB. All excess treated recycled water not used by toilet flushing, irrigation, and washing uses will be directed to the GSD system, using already sewer capacity (8 EDUs) which has already been assessed to the property by GSD. Based on the foregoing, project impacts to hydrology and water quality, which are less than significant with mitigation, are likely to be further reduced.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The area of the permeable trail would be increased from 14,000 square feet to 17,000 square feet. The trail would allow for multiple-purpose uses, including pedestrians and bicycles, and would continue to resemble a sidewalk. The widening of the sidewalk would only minimally add to the project footprint. Project impacts to hydrology and water quality, as mitigated, remain less than significant.

Revisions to First Floor Elevations of Wellness Center Buildings and Water Recycling Systems: Additional project details, as described below, have been provided to comply with Mitigation Measure HYDRO-9:

1. First floor elevations were raised from 18 feet to 20 feet NGVD.[1]

2. Wellness Center structures, as necessary, will be surrounded by a 4-foot tall foundation wall designed to resist and direct flow away from the buildings.

3. A vegetative buffer of wetlands trees will be installed around the perimeter of the property and will be designed to resist hydraulic flow and resist the transport of debris that may impact the Big Wave property.

4. For the protection of water and wastewater facilities, the project has incorporated the following features:

    a. All water recycling systems will be buried and capable of continuous operation in a submerged state. The minimum elevation of the water recycling system manholes will be 18 feet (3.5 feet above the maximum recorded tsunami inundation). All pumps will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

    b. The well is located at an elevation of 26 feet (11.5 feet above the maximum tsunami elevation). The well utilizes a submersible pump capable of continuous operation in a

[1] *Project elevations are based on a Base Flood Elevation (BFE) of 8.5 feet NGVD (refer to pages IV.H-17 and 18 and Figure IV.H-6 of the DEIR), a maximum recorded wave run-up elevation of 14.35 feet NGVD in 273 years, and a highest projected sea level rise over the next century of 5 feet from the current mean high tide. (Currently, mean high tide is at 3.49 feet NGVD.) Project elevations are over 5 feet above the highest of these levels (tsunami at 14.35 feet NGVD).*

submerged state. The well pump will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

c. As additional backup, project contains 2 days of water and wastewater storage that will prevent a lack of supply or wastewater spillage from occurring until after the tsunami event has subsided.

While compliance is required to reduce risk from tsunami and seiche, implementation of the above project details would also reduce impacts from flooding and sea level rise as described in the DEIR. Therefore, project impacts to hydrology and water quality remain less than significant, as mitigated.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: The project would comply with Mitigation Measure GEO-7 by removing impermeable soils below the pavement when practical and replacing them with gravel. All permeable pavements will be supported by gravel and will be constructed with concrete pavers with adequate gravel separation to insure infiltration. All drainage will be diverted away from the structures. Subdrains will be installed to divert water away from the structures. Impacts related to drainage, as discussed in the DEIR, would remain at less than significant with mitigation.

LAND USE AND PLANNING

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). The project would be required to comply with policies and regulations pertaining to construction operations for the full length of project construction. The project impacts to land use and planning would remain at less than significant as discussed in the DEIR.

New Recommended Mitigation Measure LU-2 (CDP Required from California Coastal Commission): A Coastal Development Permit from the California Coastal Commission (CCC) is required for development activities that extend within tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the Coastal Zone. As described in the revision to page IV.I-12 of the DEIR under Section III.B of the FEIR, the project must comply with Coastal Act policies and permitting requirements for any portion of the project that may extend within the CCC's original jurisdiction. The DEIR states that the project is consistent with the Local Coastal Program (see revisions under page IV.I-36 of the DEIR, in Section III.B of the FEIR), which has been certified by the CCC as being consistent with, and and adequate to carry out the requirements of the Coastal Act. The proposed project would be required to comply with applicable regulations of the LCP and the Coastal Act regardless of whether the requirement is stated in a mitigation measure. Therefore, impacts would be less than significant.

NOISE

3/7.4/20-Year Construction Scenarios (Construction Noise): As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Use of heavy equipment, smaller power tools, generators, and other noise sources would be reduced due to non-concurrent building construction, and thereby noise levels would be reduced. This scenario would involve exposure to lower noise levels occurring at four separate points in a period extending up to 20 years. Mitigation Measure NOISE-1 of the DEIR requires the developer to implement noise reduction measures that would further reduce this impact, which would remain at less than significant, as mitigated.

3/7.4/20-Year Construction Scenarios (Construction-Related Ground-Borne Vibration): As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Grading, excavation, and building construction activities, which generate low levels of ground-borne vibration, would be scaled down, and thereby vibration levels would be reduced. Instead of greater levels of vibration, these scenarios would involve exposures to lower levels of vibration occurring at four separate points in a period extending up to 20 years. In compliance with Mitigation Measure NOISE-1, the applicant proposes to use drilled piers instead of impact pile drivers, which would further reduce this impact. Project noise impact would remain at less than significant, with mitigation.

Additional Information Provided to Comply with Geotechnical Mitigation Measures: To comply with Mitigation Measures GEO-1 through 8, the project will incorporate a foundation of drilled pier supported interlocking grade beams. As the applicant will utilize drilled piers instead of impact pile drivers, this design specification complies with Mitigation Measure NOISE-1. Project noise impact would remain at less than significant, with mitigation.

Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): As discussed in the DEIR, operational noise levels at the project site, including airport and roadway noise levels, are less than significant. The modification of Mitigation Measure HAZ-3 to require, prior to approval of final development plans, an avigation easement to be established for the project site, does not affect project noise levels and noise impacts from aircraft would remain less than significant.

POPULATION AND HOUSING

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Under both 7.4-year and 20-year scenarios, construction of buildings would be non-concurrent and would require a reduced labor force to be employed at any one time. Therefore, construction employment at any one time would be reduced. This would result in a reduced impact related to induction of population growth, which is less than significant as discussed in the DEIR.

Improved Mitigation Measure HAZ-3 (Hazards Associated with Airport Operations): Mitigation Measure HAZ-3 requires, prior to approval of final development plans, an avigation easement to be established for the project site, in a form satisfactory to the County Director of Public Works. The mitigation measure requires the avigation easement to be recorded and shown on the vesting tentative map. Text additions improve the disclosure tool by acknowledging the importance of the Half Moon Bay Airport to the residents of this County and require the Wellness Center resident(s) unable or unwilling to tolerate airport noise as permitted by the avigation easement to be relocated rather than to impose changes on airport operations. The applicant has informed the County that it expects very few, if any, residents will need to relocate due to aircraft noise and the potential relocation of an anticipated small number of disabled residents due to discomfort caused by noise would not reduce or increase the potential of population growth in the area or significantly impact housing supply. Overall, the Wellness Center would continue to fulfill an existing need for special needs housing in the area, which is currently limited.

PUBLIC SERVICES

Police

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Construction fencing would continue to mitigate the potential impact (i.e., nuisances, hazards, theft and vandalism) to police protection services from construction sites to a less than significant level.

Fire Protection

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). Implementation of "good housekeeping" procedures by the construction contractors would continue to mitigate potential fire hazards during construction. Based on the close proximity of the nearest police station and practices of navigating through traffic (i.e., use of sirens), impacts to police service would continue to be less than significant with mitigation.

On-site Pool or Fire Tank as Fire Supply: The proposed system would meet the requirements of the Coastside County Fire Protection District (District), including pressure and flow, and would not strain existing municipal water supplies. Therefore, the proposed on-site options for water storage, as approved by the District, would not impact fire services to the site.

Schools

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction

scenarios as construction is a temporary activity with temporary impacts. The project impacts to schools would remain at less than significant as discussed in the DEIR.

Parks and Recreation

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The project impacts to parks and recreation would remain at less than significant as discussed in the DEIR.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The widening of the trail would allow for multiple-purpose uses including pedestrians and bicycles and would continue to resemble a sidewalk. The trail would continue to provide a sidewalk where one does not currently exist and a linkage to existing park and recreation opportunities in the area. The project impacts to parks and recreation would remain at less than significant as discussed in the DEIR.

Libraries

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The project impacts to libraries would remain at less than significant as discussed in the DEIR.

TRANSPORTATION/TRAFFIC

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). The amount of construction traffic would be reduced under these scenarios and spread out over a period extending up to 20 years. County and emergency services would be notified of any planned road closures or restrictions on any roadways, alternative emergency routes, and detours due to construction activities on the project site. While impacts related to construction traffic would continue to be less than significant, implementation of recommended Mitigation Measure TRANS-8 of the DEIR, which recommends a traffic control plan and requires on-site staging, would further reduce any impact.

Revised Wellness Center Site Plan, Including Elimination of Wellness Center "Community Center" and Reduction in Parking Spaces from 73 to 50 Spaces: The new site plan reduces the Wellness Center footprint, square footage, and reduces the traffic trips per day by eliminating the community recreational space. The fitness center will not be available to the general public, but only to Wellness Center residents, guests, and staff and Office Park employees. Limiting the use of the Wellness Center reduces the amount of traffic trips estimated for the Wellness Center by 215 trips, from 384 to 169 trips.

Therefore, total project trips have been so reduced from 2,123 trips to 1,908 trips. The reduction in trips is local and does not impact the intersections at Highway 1 and 92. Project traffic impact levels, less than significant with mitigation as discussed in the DEIR, would be further reduced. Regarding the reduction in 23 parking spaces, as shown in Table IV.M-10 of the DEIR, 33 of the Wellness Center parking spaces were allocated to the Community Center. The Community Center, which was open to the Coastside public, has been eliminated and the fitness center would only be available to Wellness Center residents, staff, guests and Office Park employees. Other than Wellness Center guests, all fitness center users would work or live on-site. The applicant proposes to retain 10 of the spaces allocated for the Community Center. Parking spaces allocated to other uses remain the same. Therefore, project would not result in inadequate parking capacity and impacts would continue to be less than significant and no mitigation measures are required.

Widening of Airport Street Class 1 Multi-Purpose Trail from 8 Feet to 10 Feet: The widening of the trail would allow for multiple-purpose uses including pedestrians and bicycles and would continue to resemble a sidewalk. The trail would continue to provide a sidewalk where one does not currently exist and a linkage to existing park and recreation opportunities in the area. The project impacts to transportation and traffic in the area would remain at less than significant with mitigation as discussed in the DEIR.

Office Park Shuttle to Accommodate a Minimum of 50 Cars and Their Drivers: Prior to occupancy of any Office Park building, the applicant will implement Traffic Demand Management (TDM) measures, including an off-site parking agreement and shuttle services to the Office Park (to accommodate a minimum of 50 cars and their drivers) for the purpose of reducing project traffic on Cypress Avenue, Prospect Way, Broadway to Cornell Avenue, Harvard Avenue, and Yale Avenue. Project traffic impact levels, which are less than significant with mitigation as discussed in the DEIR, would be further reduced.

UTILITIES AND SERVICE SYSTEMS

Sewer

Replacement of Septic Drainfields with Title 22 Treated Wastewater Disposal to Granada Sanitary District (GSD) System: Regarding wastewater disposal, all sub-surface wastewater disposal has been eliminated from the project, including the three drain fields and rain gardens. All wastewater will be treated to a level meeting Title 22 requirements. Topical Response 15, Project Potable and Recycled Water Demand, states that 26,000 gpd is the upper limit of wastewater generation. Wastewater generation would be reduced in drought years to 21,000 gpd, due to water conservation measures. With the use of recycled water for toilet flushing and additional uses such as landscape irrigation, and solar panel and surface washing at the sites, excess wastewater would be reduced to zero under average and drought year conditions. The applicant proposes to connect to the GSD sewer system for 8 equivalent dwelling units (EDUs), where 8 EDUs is equivalent to 1,768 gallons per day, for the discharge of unused Title 22 treated water as needed.[2] The applicant also proposes an emergency connection to provide for a backup wastewater management system in the instance that the on-site wastewater treatment system fails or is over capacity. Reference Response to Comment 209-13 regarding GSD capacity to provide a level of service accommodating 8 EDUs. The emergency connection would be subject to GSD review,

[2] *EDUs are used to calculate the connection fee charged by the Granada Sanitary District. Taxes for eight (8) EDUs have been assessed by GSD to the property. One (1) EDU is equivalent to 221 gallons per day.*

approval, and conditions of approval at the time of GSD permit application and a condition of approval of the project would require proof of the applicant having secured such a connection from GSD. Mitigation Measures UTIL-1 through 6 would continue to apply to the project. Therefore, project impacts to sewer services, which are less than significant with mitigation, would remain the same.

Water

On-site Pool or Fire Tank as Fire Supply: The fire system has the following benefits to conventional municipal water supply: The proposed system would not rely on a water system connection and therefore would not strain existing municipal water supplies. Therefore, the proposed on-site options for water storage would not further impact water services to the site.

Impacts of Landscape Buffers and Drip Irrigation: Landscape irrigation would only utilize recycled water. The amount of treated wastewater available for irrigation is adequate to support the additional landscaping. The additional landscaping will therefore not result in any additional impacts to water services or supplies.

Water System will be Operated by a Mutual Water Company: Community operation insures compliance and additional redundancy. The proposed water system described in the DEIR had impacts that were less than significant. The above clarification has impacts that are the same and still less than significant.

Additional Details Regarding Water Recycling Systems: For the protection of water and wastewater facilities, all water recycling systems will be buried and capable of continuous operation in a submerged state. The minimum elevation of the water recycling system manholes will be 18 feet (3.5 feet above the maximum recorded tsunami inundation). All pumps will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs.

Also, the well is located at elevation 26 feet (11.5 feet above the maximum tsunami elevation). The well utilizes a submersible pump capable of continuous operation in a submerged state. The well pump will be submersible and powered from electrical systems that are located at a minimum elevation of 30 feet (approximate elevation of the tsunami evacuation zone). Electrical connections to the submersible pumps will be waterproof and explosion proof. The system will be designed to continue to operate after inundation if a tsunami of greater than the 200-year tsunami event occurs. As additional backup, the project includes 2 days of water and wastewater storage capacity that will provide water supply and prevent wastewater spillage from occurring until after the tsunami event has subsided. Additional details have been provided to comply with Mitigation Measure HYDRO-9 and further protect water supplies in the event of a tsunami or flood. Therefore, project impacts to project water usage would remain at less than significant with mitigation as discussed in the DEIR.

Elimination of RO Well Water Treatment: The project includes treatment to improve well water quality that includes microfiltration and UV disinfection. The RO treatment discussed in the DEIR is no longer part of the treatment process. As stated on page IV.N-37 of the DEIR, based on the June 2009 testing of the existing well water, the water quality is suitable for domestic-community water supply, without the

need for RO treatment. The observed high levels of color, iron and manganese could be addressed with conventional water treatment methods. Water quality would continue to be regulated by applicable State agencies (i.e., RWQCB and CDPH). Therefore, water treatment is a less than significant impact and no mitigation measures are needed.

Solid Waste

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The impacts related to project generation of solid waste would remain at less than significant as discussed in the DEIR.

Energy

3/7.4/20-Year Construction Scenarios: As discussed in Topical Response 12, Construction Phasing for the Office Park, building construction may exceed 3 years (estimated at 7.4 years under a continuous, non-concurrent building construction scenario) and extend up to 20 years (under a non-continuous, non-concurrent building construction scenario). There is no change in impact under these construction scenarios as construction is a temporary activity with temporary impacts. The impacts related to project use of energy would remain at less than significant as discussed in the DEIR.

Elimination of Natural Gas for Heating and Building Operations Due to Solar Power: Natural gas would be used for backup purposes only. Therefore, natural gas usage in the residences and offices would be reduced from levels described in the DEIR. Therefore, project impacts to energy usage, which are less than significant, would be further reduced.

Anti-glare, Anti-reflective Surface to be Used on Solar Panels: An anti-glare, anti-reflective surface would be used on all solar panels in order to minimize glare and reflection from the panels. This specification would not reduce efficiency of the solar panels. Therefore, project impacts to energy usage, which are less than significant, would be further reduced.

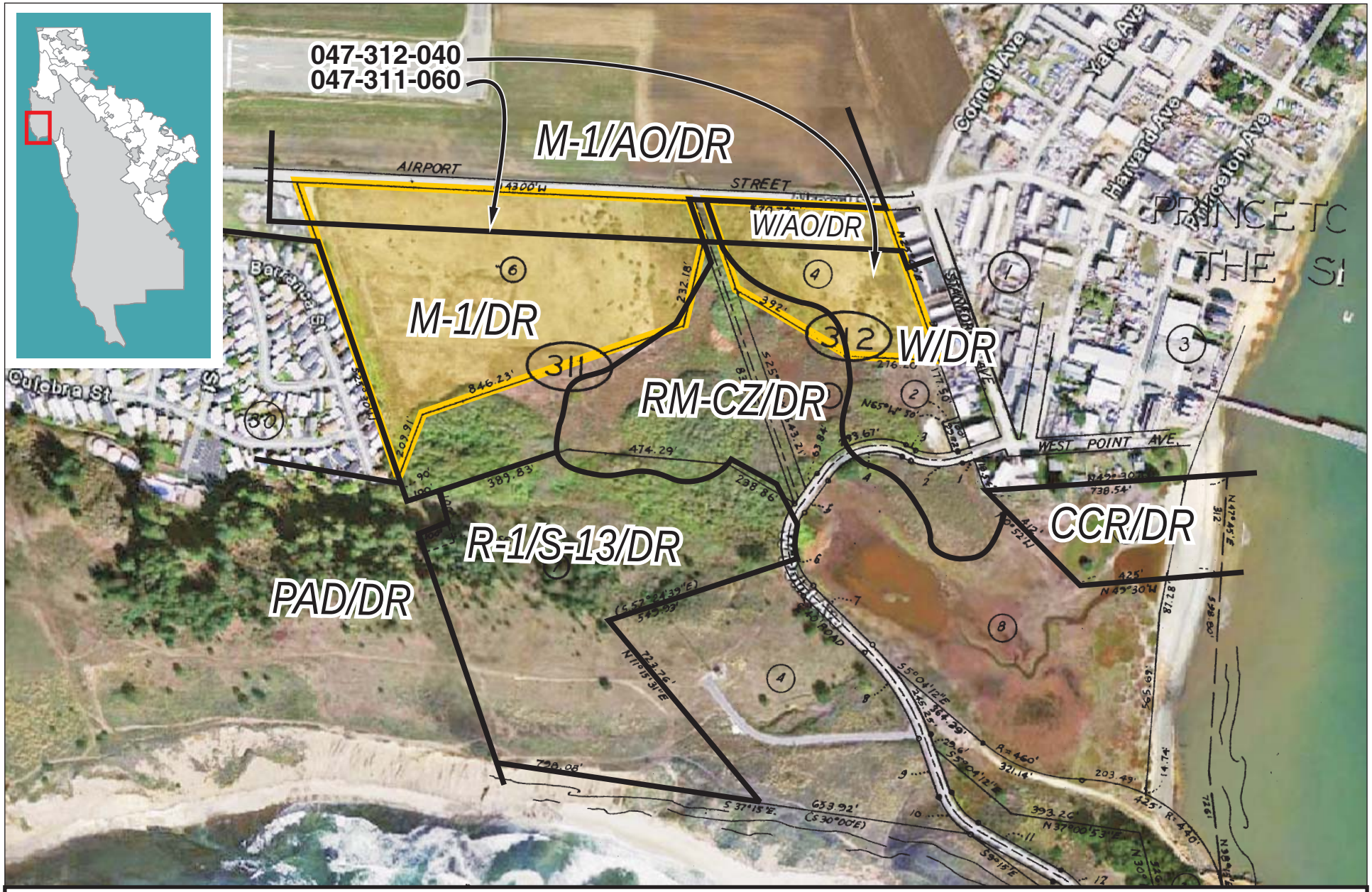
CUMULATIVE IMPACTS

The cumulative impacts of the implementation of the changes to the DEIR, as described in Sections III.A and B of the FEIR, remain comparable to or less than project impacts as discussed in the DEIR. However, specific discussion of cumulative construction-related noise/air quality/traffic impacts associated with the 3/7.4/20-Year Construction Scenarios is appropriate. As described in Topical Response 12, Construction Phasing for the Office Park, the project construction timeframe may exceed the timeframe described in the DEIR of 30-36 months or approximately 3 years (a high economic demand for mixed-use office space, concurrent construction scenario). Instead, the project construction timeframe may last approximately 7.4 years, which is described as the Worst-Case Noise Impact Scenario (under lower economic demand for mixed-use office space and non-concurrent, continuous construction, in which each building is constructed separately with no gaps in between). Under this scenario, buildings are completed within a 7.4-year timeframe, with lower noise levels in the short-term, but extended over a longer duration. It is possible that construction of some of the 37 related projects (listed in Table III-1 on pages III-15 and 16 of the DEIR) may also be delayed due to similar economic conditions. Therefore, under this scenario, cumulative noise/air quality/traffic impacts discussed in the DEIR would be at similar levels but will take place further into the future. However, due to the phased construction of the Office Park buildings, project construction noise/air quality/traffic impact for any period would be reduced from the project construction noise/air quality/traffic impact under the 3-year construction scenario described in the DEIR due to non-concurrent construction of the four Office Park buildings. Therefore, potential cumulative construction noise/air quality/traffic impact under the 7.4-year scenario would be less than significant.

Under the 20-year construction scenario (under a low-economic demand and non-concurrent, non-continuous construction scenario), it is likely that within this longer construction timeframe most or all of the 37 related projects would have been constructed by the time the Office Park is fully built out. Therefore, it would be difficult to assess cumulative construction noise/air quality/traffic impacts without knowledge of the future related projects. However, cumulative construction noise/air quality/traffic impacts over this timeframe are anticipated to be less than significant due to the experience of a reduced level of construction noise/air quality/traffic impacts (due to non-continuous, non-concurrent Office Park building construction) over the longer timeframe.

III. CORRECTIONS AND ADDITIONS TO THE DRAFT EIR
D. NEW FIGURES

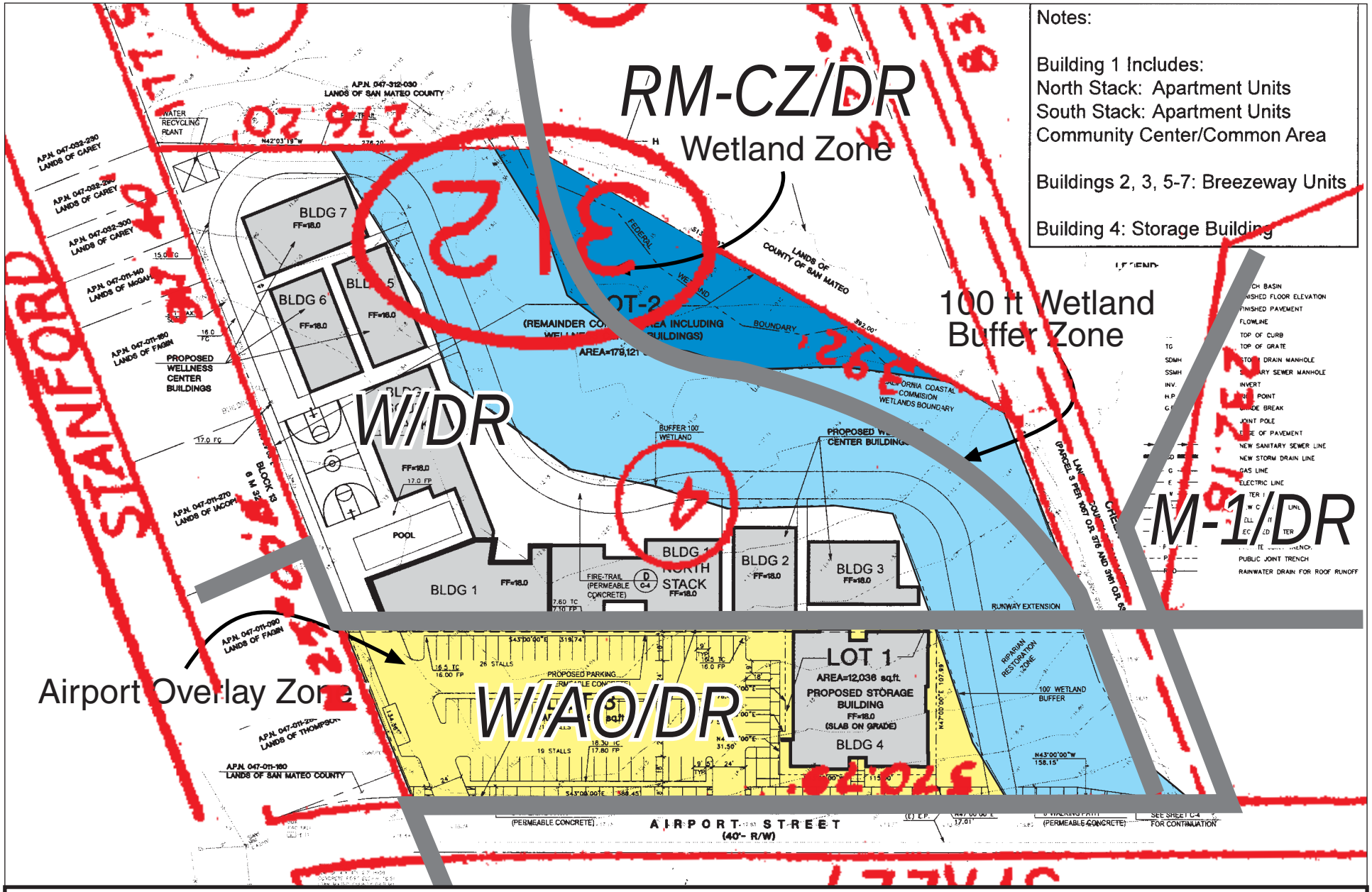
New figures to follow this page.



Big Wave Final EIR

Zoning Map

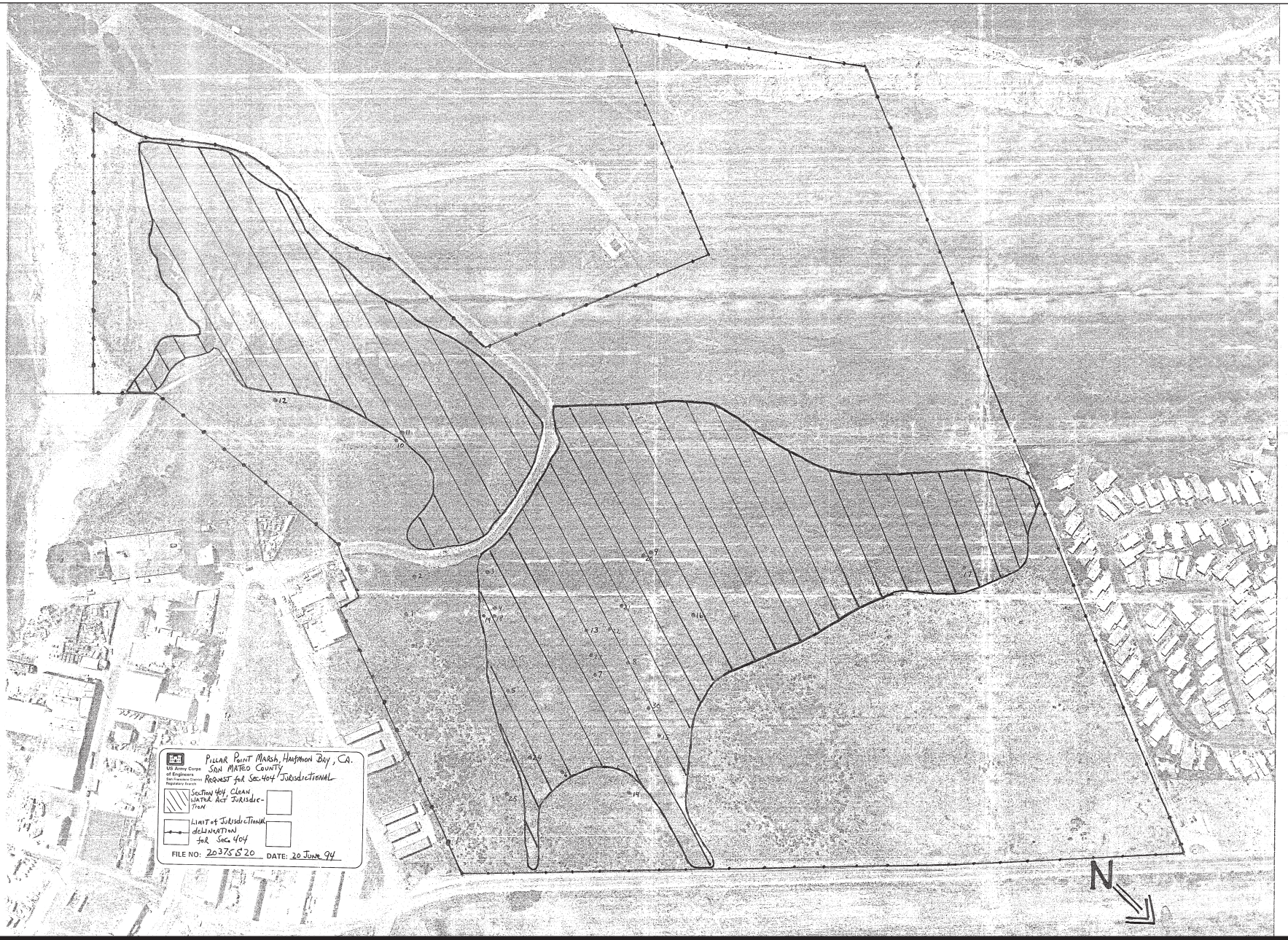
Figure A



Big Wave Final EIR - Wellness Center

Zoning Map

Figure B



San Mateo County - Big Wave Final EIR

FIGURE: C

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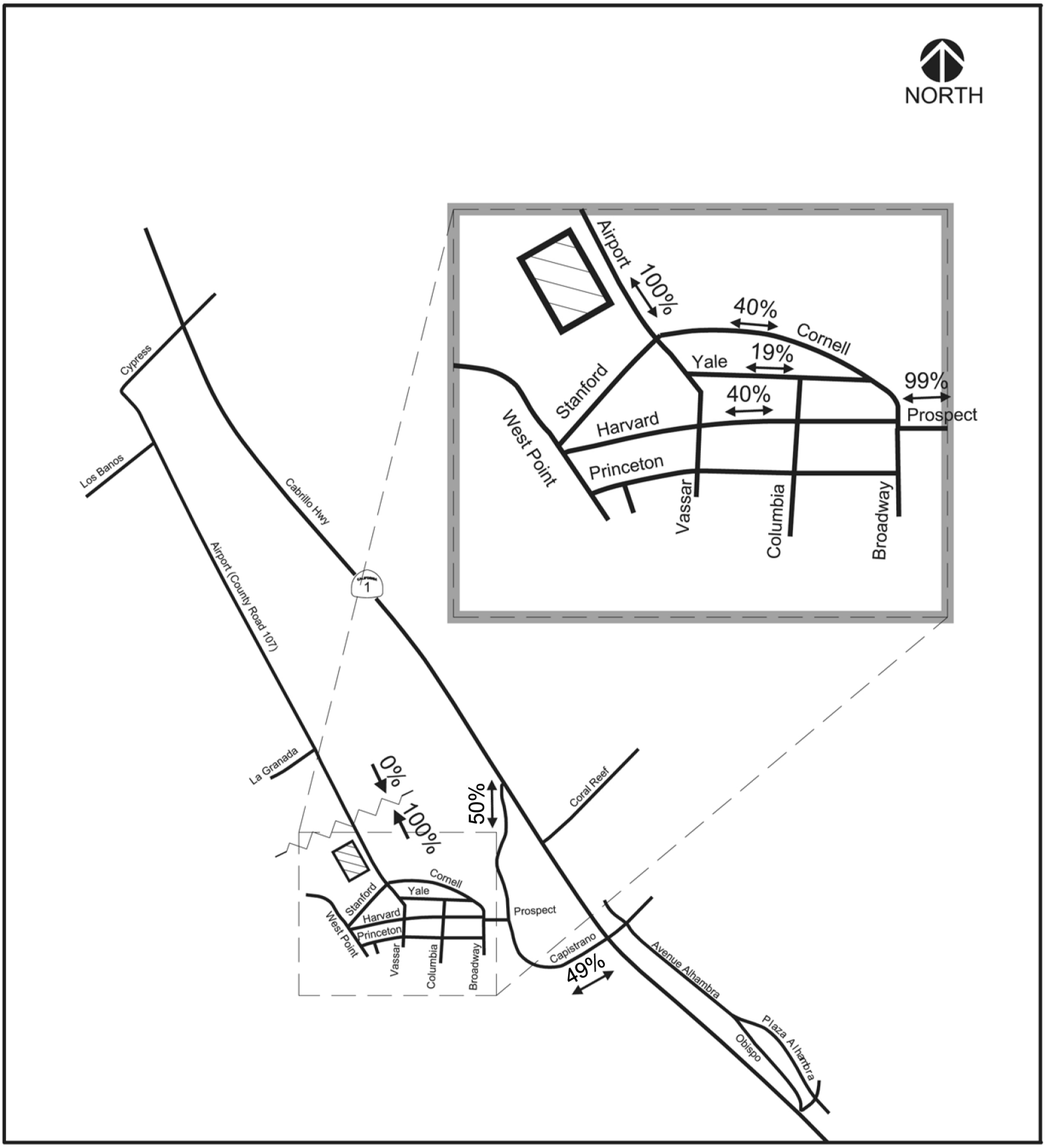


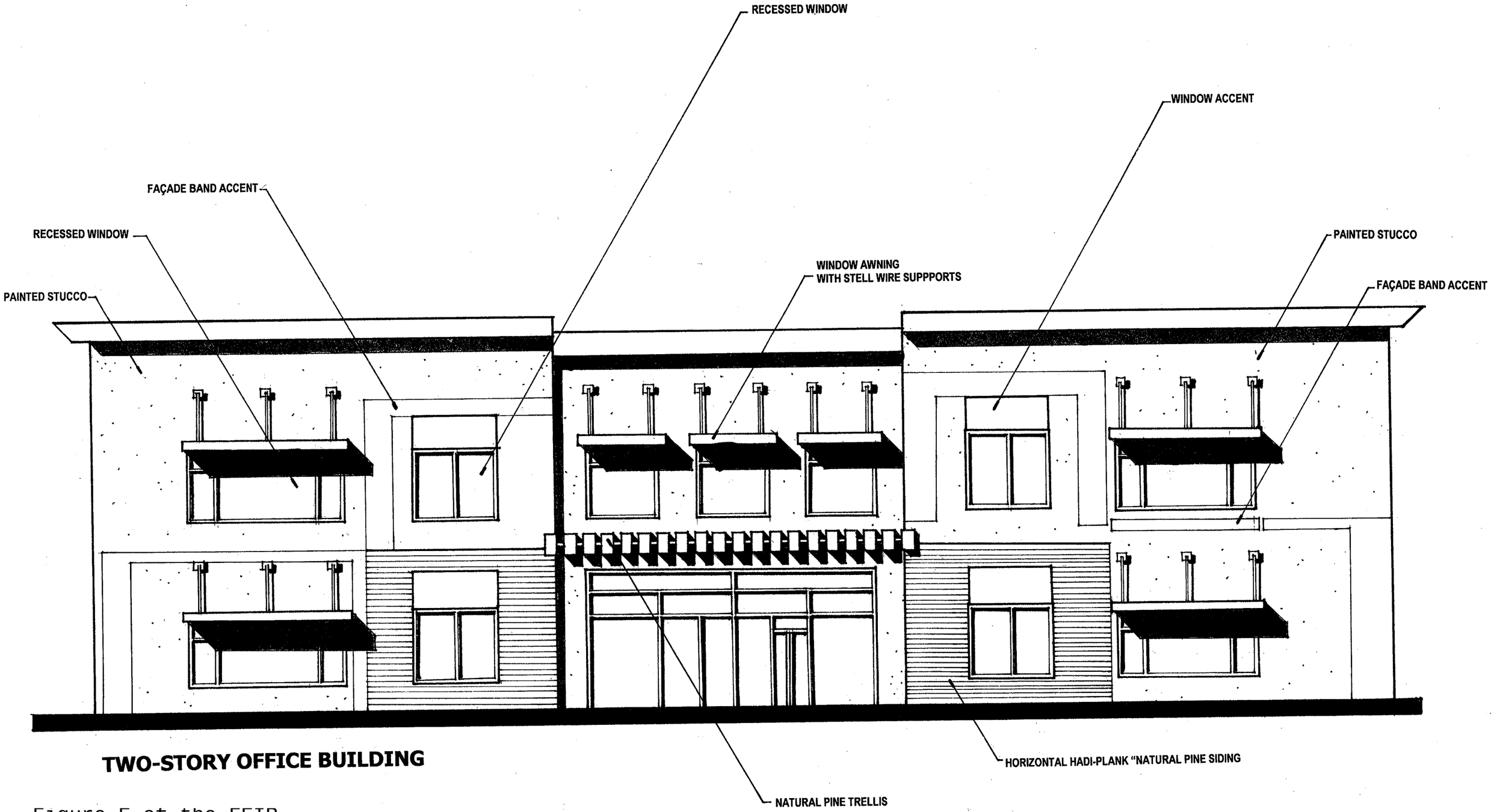
LEGEND

SITE LOCATION

FIGURE D

MODIFIED ALTERNATIVE C - TRAFFIC OPTION FOR OFFICE PARK

Big Wave Office Park and Wellness Center - Final EIR



TWO-STORY OFFICE BUILDING

Figure E of the FEIR

THREE-STORY OFFICE BUILDING

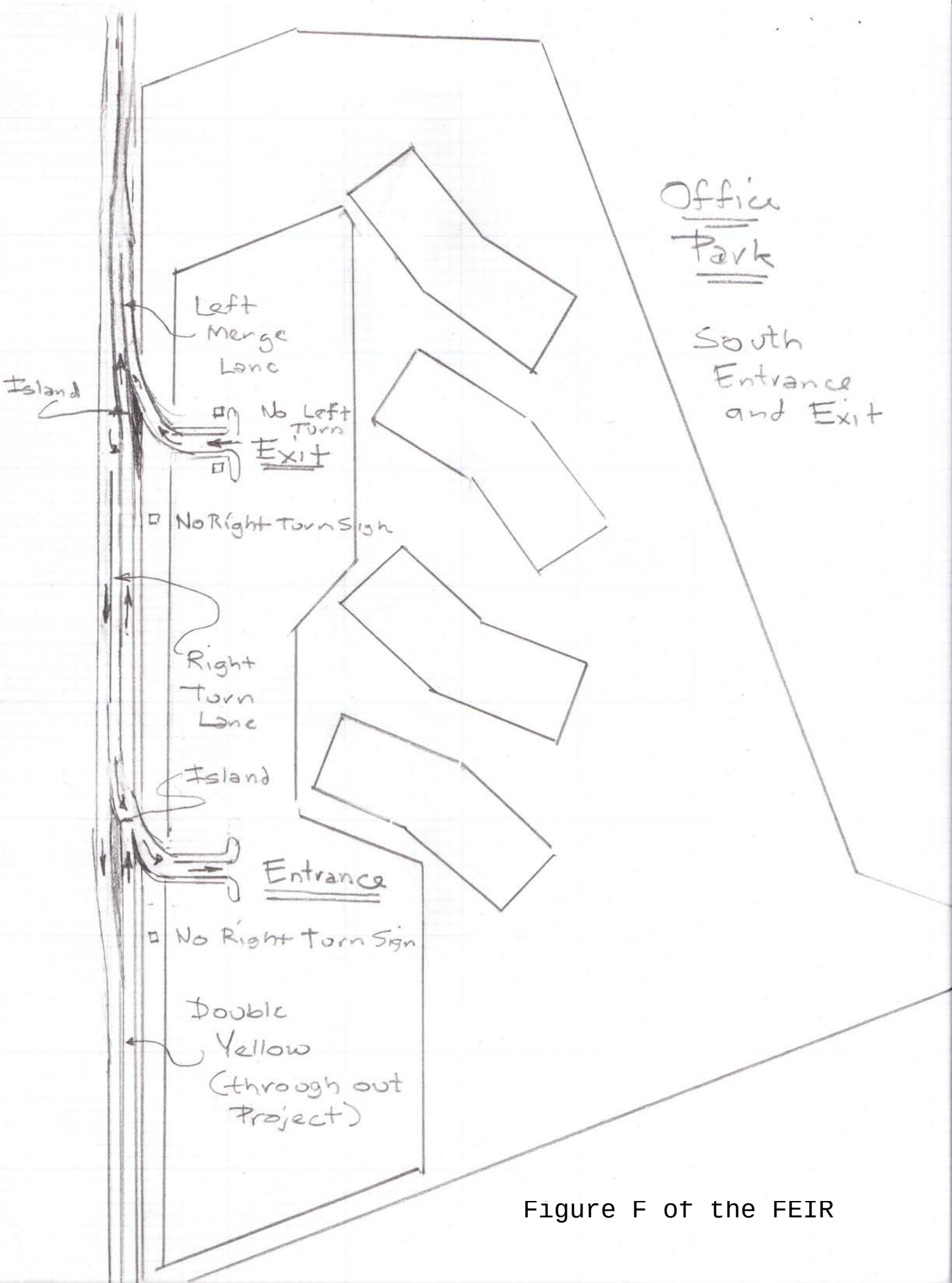
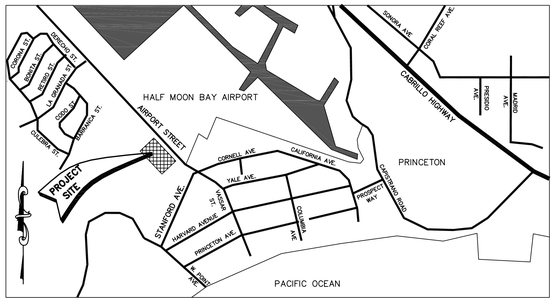


Figure F of the FEIR



LOCATION MAP

NOT TO SCALE

HEAVILY WOODED AREA

20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY

209.91'

N66°39'08"E

100' WETLAND BUFFER

846.23'

WETLAND BOUNDARY

LANDS OF COUNTY OF SAN MATEO

N63°37'49"W

D C-4 PERMEABLE PAVERS (TYPICAL)

PARCEL 1
(56 PM 21-22)
A.P.N. 047-300-040 & 060
LANDS OF COACH
SAN DIEGO INC.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE

N25°56'26"E

8" DIA. PERFORATED PVC PIPE (TYP.) B C-4

SSMH 17.44 INV

SSMH 18.34 INV

SSMH 16.84 INV

(3) 1500 GAL. WATER RECYCLING SYSTEM FOR FLOW EQUALIZATION (TYPICAL)

(PERMEABLE CONCRETE)

100' WETLAND BUFFER

232.18'

S49°23'42"W

LANDS OF COUNTY OF SAN MATEO (PARCEL 3 PER 1057 O.R. 375 AND 3161 O.R. 531)

S5°55'49"W

150.00'

FF=21.5
BUILDING E
1st 11,250 SF
2nd 11,250 SF
22,500 SF

FF=21.5
BUILDING F
1st 11,250 SF
2nd 11,250 SF
22,500 SF

FF=21.5
BUILDING G
1st 11,250 SF
2nd 11,250 SF
22,500 SF

FF=21.5
BUILDING H
1st 11,250 SF
2nd 11,250 SF
22,500 SF

FF=22.5
BUILDING D
1st 11,248 SF
2nd 11,248 SF
22,496 SF

FF=22.00
BUILDING C
1st 11,250 SF
2nd 11,250 SF
22,500 SF

FF=22.5
BUILDING B
1st 11,248 SF
2nd 11,248 SF
22,496 SF

FF=23.00
BUILDING A
1st 11,250 SF
2nd 11,250 SF
22,500 SF

DISTRIBUTION BOX CONTROL VALVE

SSMH 16.28 INV

SSMH 17.69 INV

SSMH 15.80 INV

RUNWAY EXTENSION FOOTPRINT

20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY

PARCEL 2
(56 PM 21-22)
A.P.N. 047-300-050
LANDS OF BUCKS BUTANE
PROPANE SVCS INC.

WELL ENCLOSURE AGRICULTURAL WELL

PROPOSED PARKING (PERMEABLE PAVERS)

(E) JP

940.00'

S43°00'00"E 1151.64'

AIRPORT ← STREET
(40'- R/W)

TEMPORARY BENCHMARK:
NAIL & SHINER
ELEV.= 27.46
SAN MATEO COUNTY DATUM

SEE SHEET C-4 FOR CONTINUATION

WALKING PATH (PERMEABLE CONCRETE)

12" DIA. CULVERT (TYPICAL)

C C-4 PERMEABLE PAVERS (TYPICAL)

12" DIA. CULVERT (TYPICAL)

8" DIA. PERFORATED PVC PIPE (TYP.) B C-4

WALKING PATH (PERMEABLE CONCRETE)

12" DIA. CULVERT (TYPICAL)

GENERAL NOTES:

1. ELEVATIONS AND LOCATIONS OF ALL UTILITY CROSSINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION AFFECTING SAID LINES. CONTACT USA AT (800) 642–2444 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION.
2. ALL APPLICABLE WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY OF SAN MATEO STANDARD TECHNICAL SPECIFICATIONS AND DETAILS, PREPARED IN THE OFFICE OF THE ENGINEERING DIVISION, INCLUDING MODIFICATIONS CONTAINED HEREIN.
3. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED WALLS, FENCES, SERVICES, UTILITIES, IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, DUE TO CONTRACTORS WORK.
4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE INSTALLATION OF FACILITIES BY PG&E, PACIFIC BELL, AND CABLE TV INSTALLATION. VALVE BOXES AND STRUCTURES TO BE SET TO GRADE IN CONCRETE AFTER PAVING.
5. THE CONTRACTOR SHALL GIVE THE COUNTY ENGINEER AT LEAST TWO WORKING DAYS ADVANCE NOTICE FOR INSPECTION. (650) 363–4100.
6. FOR LANE CLOSURES, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND SHALL OBTAIN APPROVAL OF THE COUNTY ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE FLAGMEN, CONES AND BARRICADES, AS NECESSARY TO CONTROL TRAFFIC AND PREVENT HAZARDOUS CONDITIONS.
7. PEDESTRIAN AND PUBLIC ACCESSES SHALL BE MAINTAINED DURING CONSTRUCTION TO THE SATISFACTION OF THE COUNTY ENGINEER.
8. NO TRENCHES OR HOLES SHALL BE LEFT OPEN OVERNIGHT; USE STEEL PLATING OR HOT MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES OVERNIGHT.
9. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE COUNTY ENGINEER.
10. THE GEOTECHNICAL REPORT PREPARED BY BAY AREA GEOTECHNICAL GROUP, PROJECT NO. BIGWA–01–00, DATED MAY 7, 2002 SHALL BE MADE A PART OF THIS PLAN.

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POLE
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE
WW	WELL WATER
RW	RECYCLED WATER
PVJT	PRIVATE JOINT TRENCH
PJT	PUBLIC JOINT TRENCH

GRADING QUANTITIES (C.Y.):

	CUT	FILL
EXCAVATE TOP SOIL AND STOCKPILE ON SITE (1' MIN. CUT)	19,500	
BUILDING PADS		7,740
PARKING LOT		6,170
SWALE AND RETENTION PONDS	2,375	1,870
TOTAL	21,875	15,780

EXPORT= 21,875 – 15,780 = 6,095 C.Y. (EXPORT TO WELLNESS CENTER PROJECT)

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Figure G of the FEIR

NO.	DESCRIPTION	BY:	DATE:

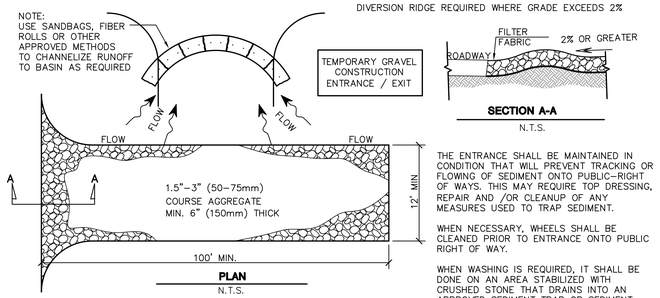
REGISTERED PROFESSIONAL ENGINEER DANIEL G. McCLEOD No. 35048 CIVIL STATE OF CALIFORNIA

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593–8580

PREPARED FOR:
BIG WAVE LLC

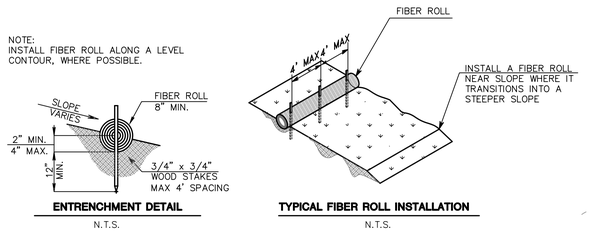
PRELIMINARY GRADING / DRAINAGE / UTILITY AND PERMANENT STORM WATER CONTROLS
BIG WAVE OFFICE PARK
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	05/17/10
DRAWING NO.	1608–00
SHEET	C-2



A CONSTRUCTION ENTRANCE DETAIL

SCALE: NOT TO SCALE

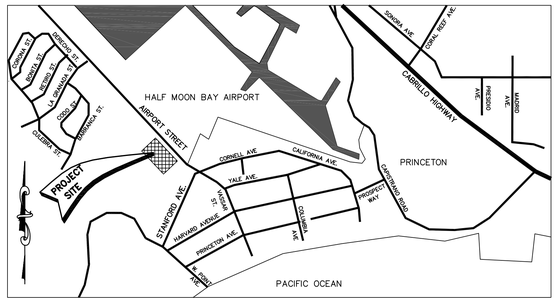


B FIBER ROLL INSTALLATION DETAIL

SCALE: NOT TO SCALE

DUST CONTROL NOTE:

1. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE COUNTY INSPECTOR.
2. DURING WINDY CONDITIONS, EXPOSED SOIL SURFACES SHALL BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
3. KEEP PAVED AREAS CLEAN OF SOIL IN CONJUNCTION WITH EROSION CONTROL MEASURES.



LOCATION MAP

NOT TO SCALE

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
FP	FINISHED PAVEMENT
FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POLE
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE
WW	WELL WATER
RW	RECYCLED WATER
PVJT	PRIVATE JOINT TRENCH
PJT	PUBLIC JOINT TRENCH

GENERAL EROSION CONTROL NOTES:

1. THE INTENT OF THE EROSION CONTROL PLAN IS TO MINIMIZE ANY WATER QUALITY IMPACTS IN THE FORM OF SEDIMENT POLLUTION TO MAIN CREEK & TRIBUTARIES.
2. A CONSTRUCTION ENTRANCE WILL BE INSTALLED PRIOR TO STARTOF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS– OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITION DEMAND, AND REPAIR OF ANY MEASURES USED TO TRAP SEDIMENTS.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH THE USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
4. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. BY OCTOBER 1, GRADING AND INSTALLATION OF STORM DRAINAGE AND EROSION AND SEDIMENT CONTROL FACILITIES WILL BE COMPLETED. NO GRADING WILL OCCUR BETWEEN OCTOBER 1 AND APRIL 15 UNLESS AUTHORIZED BY THE COUNTY REPRESENTATIVE.
5. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT–LADEN RUNOFF ENTERS THE STORM DRAINAGE SYSTEM.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL FIELD MANUAL OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, 4TH EDITION, DATED AUGUST 2002, OR LATER EDITION.

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

HEAVILY WOODED AREA
N66°29'08"E 209.91'
20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY
100' WETLAND BUFFER
A C-3 INSTALL TEMPORARY FIBER ROLL
INSTALL JUTE MESH OVER GRADED SLOPES
WETLAND BOUNDARY
LANDS OF COUNTY OF SAN MATEO
846.23'
N63°37'49"W
100' WETLAND BUFFER
100' WETLAND BUFFER
FIRE TRAIL (PERMEABLE CONCRETE)
232.18'
S49°23'42"W
LANDS OF COUNTY OF SAN MATEO (PARCEL 3 PER 1067 OR 375 AND 376) OR 531)
S25°49'00"W
160.00'
FF=21.5 BUILDING E 1st 11,250 SF 2nd 11,250 SF 22,500 SF
FF=21.5 BUILDING F 1st 11,250 SF 2nd 11,250 SF 22,500 SF
FF=21.5 BUILDING G 1st 11,250 SF 2nd 11,250 SF 22,500 SF
FF=21.5 BUILDING H 1st 11,250 SF 2nd 11,250 SF 22,500 SF
FF=22.5 BUILDING D 1st 11,248 SF 2nd 11,248 SF 22,496 SF
FF=22.00 BUILDING C 1st 11,250 SF 2nd 11,250 SF 22,500 SF
FF=22.5 BUILDING B 1st 11,248 SF 2nd 11,248 SF 22,496 SF
FF=23.00 BUILDING A 1st 11,250 SF 2nd 11,250 SF 22,500 SF
RUNWAY EXTENSION FOOTPRINT
100'± MIN.
100'± MIN.
PROPOSED PARKING (PERMEABLE PAVERS)
WELL ENCLOSURE AGRICULTURAL
100'± MIN.
S43°00'00"E 1151.64'
AIRPORT STREET
(40'- R/W)
SEE SHEET C-4 FOR CONTINUATION
WALKING PATH (PERMEABLE CONCRETE)
A C-3 INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
A C-3 INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
WALKING PATH (PERMEABLE CONCRETE)
TEMPORARY BENCHMARK: NAIL & SHINER ELEV.= 27.46 SAN MATEO COUNTY DATUM
A C-3 INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE
N25°56'26"E
940.00'
20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY
PARCEL 1 (56 PM 21-22) A.P.N. 047-300-040 & 060 LANDS OF COACH SAN DIEGO INC.
PARCEL 2 (56 PM 21-22) A.P.N. 047-300-050 LANDS OF BUCKS BUTANE PROPANE SVCS INC.

Figure H of the FEIR

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593–8580

REGISTERED PROFESSIONAL ENGINEER DANIEL G. MacLEOD No. 35048 CIVIL STATE OF CALIFORNIA

NO.	DESCRIPTION	BY:	DATE:

PREPARED FOR: BIG WAVE LLC

EROSION / SEDIMENTATION AND DUST CONTROL PLAN

BIG WAVE OFFICE PARK
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

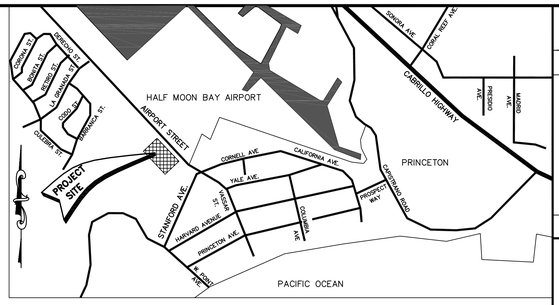
DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	05/17/10
DRAWING NO.	1608–00
SHEET	C-3

PARKING NOTE:

TYPICAL PARKING STALL DIMENSIONS	=	9' X 20'
TYPICAL HANDICAP PARKING STALL DIMENSIONS	=	9' X 20' WITH 8' WIDE UNLOADING AREA

TREE NOTE:

THERE ARE NO EXISTING TREES ON THE SUBJECT PROPERTY.



LOCATION MAP

NOT TO SCALE

EASEMENT NOTE:

PRIVATE UTILITY EASEMENTS WILL BE RESERVED OVER EACH PARCEL FOR THE BENEFIT OF THE OTHER PARCELS. WHERE APPROPRIATE, THE DELINEATION OF THOSE EASEMENTS IS NOT SHOWN ON THESE PLANS, BUT WILL BE CONFIGURED AND DELINEATED DURING THE BUILDING PERMIT PROCESS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

HEAVILY WOODED AREA

N66°29'08"E 209.91'

20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY

COASTAL TRAIL EXTENSION TO P.O.S.T. PROPERTY

100' WETLAND BUFFER

A.P.N. 047-311-050
LANDS OF SAN MATEO COUNTY
LANDS OF COUNTY OF SAN MATEO

WETLAND BOUNDARY

846.23'

N63°37'49"W

100' WETLAND BUFFER

100' WETLAND BUFFER

PARCEL 1
(56 PM 21-22)
A.P.N. 047-300-040 & 060
LANDS OF COACH SAN DIEGO INC.

LOT 2
(REMAINDER)
PARKING / WALKWAYS
AREA=218,685. sq.ft.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE

N25°56'26"E

LOT 1
(COMMON AREA)
BUFFER, AGRICULTURE, WATER RECYCLING
AREA= 294,306
FIRE TRAIL
(PERMEABLE CONCRETE)

LOT 7
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,475 sq.ft.
FF=21.5
BUILDING E
1st 11,250 SF
2nd 11,250 SF
22,500 SF

LOT 8
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,475 sq.ft.
FF=21.5
BUILDING F
1st 11,250 SF
2nd 11,250 SF
22,500 SF

LOT 9
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,475 sq.ft.
FF=21.5
BUILDING G
1st 11,250 SF
2nd 11,250 SF
22,500 SF

LOT 10
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,475 sq.ft.
FF=21.5
BUILDING H
1st 11,250 SF
2nd 11,250 SF
22,500 SF

LOT 6
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,500 sq.ft.
FF=21.5
BUILDING D
1st 11,248 SF
2nd 11,248 SF
22,496 SF

LOT 5
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,475 sq.ft.
FF=22.00
BUILDING C
1st 11,250 SF
2nd 11,250 SF
22,500 SF

LOT 4
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,500 sq.ft.
FF=22.5
BUILDING B
1st 11,248 SF
2nd 11,248 SF
22,496 SF

LOT 3
FOR COMMERCIAL CONDOMINIUM PURPOSES
AREA= 13,475 sq.ft.
FF=23.00
BUILDING A
1st 11,250 SF
2nd 11,250 SF
22,500 SF

LANDS OF COUNTY OF SAN MATEO
(PARCEL 3 PER 1067 OR 375 AND 3161 OR 531)

S49°23'42"W 232.18'

S35°49'01"W 150.00'

PARCEL 2
(56 PM 21-22)
A.P.N. 047-300-050
LANDS OF BUCKS BUTANE PROPANE SVCS INC.

20' WIDE NON-EXCLUSIVE EASEMENT FOR ROADWAY AND PUBLIC UTILITY

RUNWAY EXTENSION FOOTPRINT

PROPOSED PARKING (PERMEABLE PAVERS)

WELL ENCLOSURE AGRICULTURE

940.00'

AIRPORT ← STREET
(40'- R/W)

S43°00'00"E 1151.64'

S43°00'00"E 188.52'

S43°00'00"E 180.99'

SEE SHEET C-4 FOR CONTINUATION

WALKING PATH (PERMEABLE CONCRETE)

WALKING PATH (PERMEABLE CONCRETE)

TEMPORARY BENCHMARK:
NAIL & SHINER
ELEV.= 27.46
SAN MATEO COUNTY DATUM

Figure I of the FEIR

RECORD OWNER AND SUBDIVIDER:

BIG WAVE LLC
P.O. BOX 700
BELMONT CA. 94002

LAND SURVEYOR AND CIVIL ENGINEER

MacLEOD & ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

ASSESSOR'S PARCEL NUMBER

047-311-060

EXISTING & PROPOSED ZONING

M-1/DR - LIGHT INDUSTRIAL WITH DESIGN REVIEW

UTILITIES:

GAS AND ELECTRICITY:	PACIFIC GAS AND ELECTRIC COMPANY
SANITARY SEWER:	GRANADA SANITARY DISTRICT
WATER:	COASTSIDE WATER DISTRICT
TELEPHONE:	A T & T
FIRE PROTECTION:	HALF MOON BAY

FLOOD ZONE:

" C "

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

LEGEND:

CB	CATCH BASIN
FF	FINISHED FLOOR ELEVATION
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FL	FLOWLINE
TC	TOP OF CURB
TG	TOP OF GRATE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POINT
E.P.	EDGE OF PAVEMENT
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE

NO.	DESCRIPTION	BY:	DATE:

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

PREPARED FOR:
BIG WAVE LLC

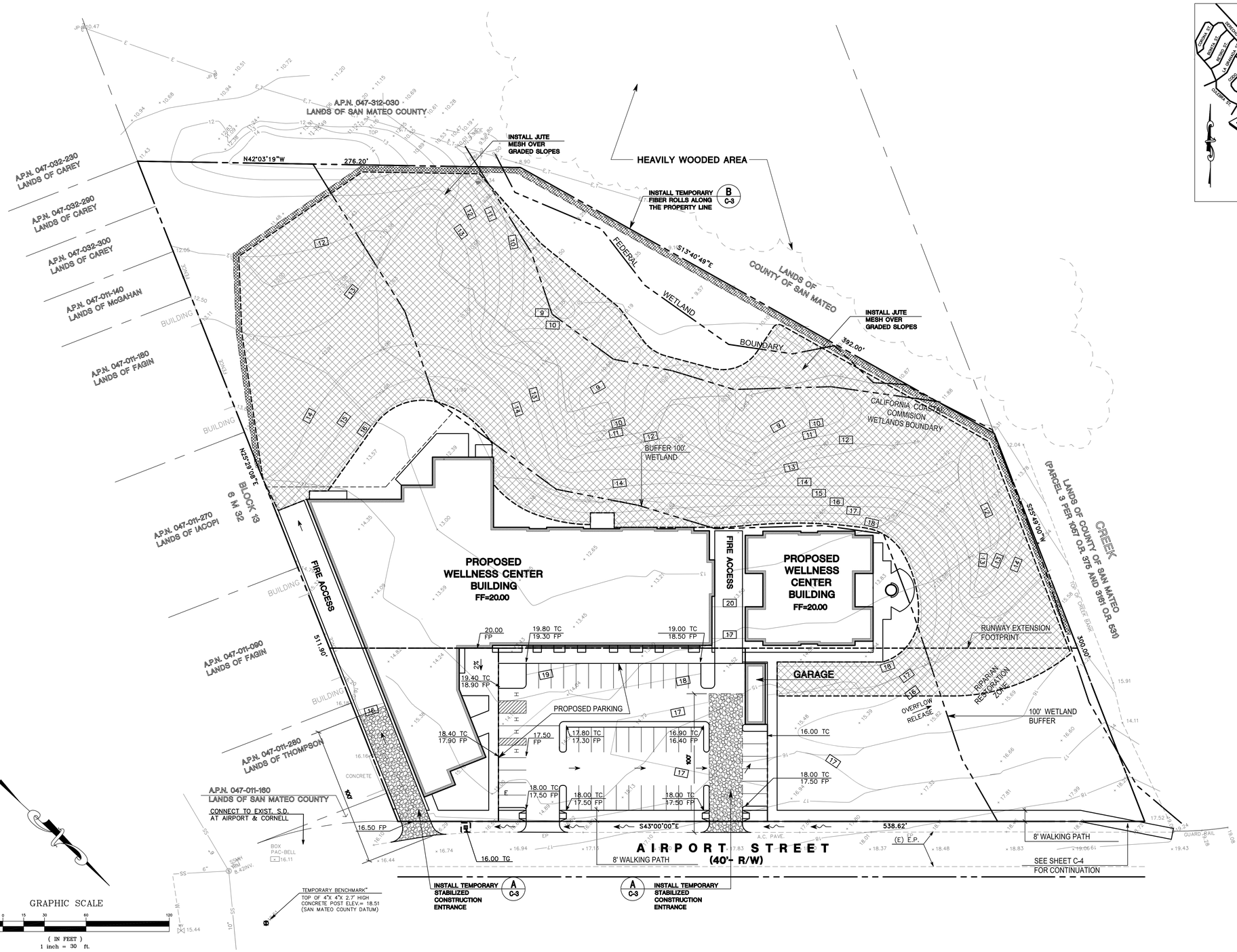
VESTING TENTATIVE SUBDIVISION MAP FOR COMMERCIAL CONDOMINIUM PURPOSES "BIG WAVE OFFICE PARK"

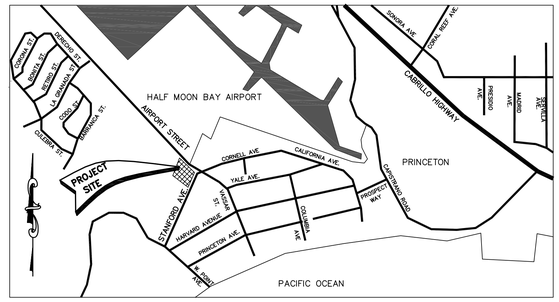
BEING A SUBDIVISION OF A.P.N. 047-311-060
AIRPORT STREET
SAN MATEO COUNTY
CALIFORNIA
PRINCETON BY THE SEA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 40'
DATE:	05/17/10
DRAWING NO.	1608-00
SHEET	C-1

LICENSED LAND SURVEYOR — DANIEL B. MACLEOD — No. 5304 — STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — DANIEL B. MACLEOD — No. 35048 — CIVIL — STATE OF CALIFORNIA





LOCATION MAP

SCALE: NOT TO SCALE

LEGEND:

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SSMH	SANITARY SEWER MANHOLE
INV.	INVERT
H.P.	HIGH POINT
G.B.	GRADE BREAK
JP	JOINT POLE
G.V.	GATE VALVE
SS	NEW SANITARY SEWER LINE
SD	NEW STORM DRAIN LINE
G	GAS LINE
E	ELECTRIC LINE
W	WATER LINE
25	NEW CONTOUR LINE
WW	WELL WATER
RW	RECYCLED WATER
PVJT	PRIVATE JOINT TRENCH
PJT	PUBLIC JOINT TRENCH

GENERAL EROSION CONTROL NOTES:

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2. A CONSTRUCTION ENTRANCE WILL BE INSTALLED PRIOR TO STARTOF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS- OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITION DEMAND, AND REPAIR OF ANY MEASURES USED TO TRAP SEDIMENTS.
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UTILITY NOTE:

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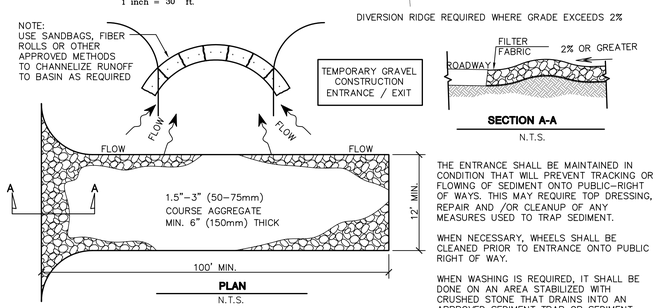
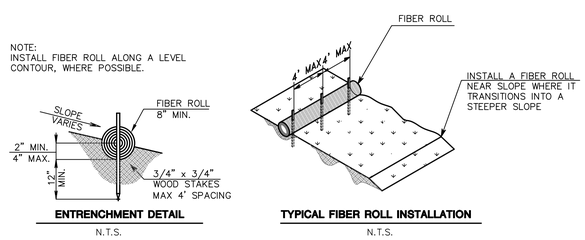
3. KEEP PAVED AREAS CLEAN OF SOIL IN CONJUNCTION WITH EROSION CONTROL MEASURES.



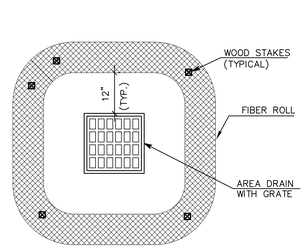
A CONSTRUCTION ENTRANCE DETAIL

SCALE: NOT TO SCALE



B FIBER ROLL INSTALLATION DETAIL

SCALE: NOT TO SCALE



C DRAIN INLET PROTECTION DETAIL

SCALE: NOT TO SCALE

Figure J of the FEIR

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING · LAND SURVEYING
965 CENTER STREET · SAN CARLOS · CA 94070 · (650) 593-8580

REGISTERED PROFESSIONAL ENGINEER DANIEL G. MacLEOD No. 35048 CIVIL STATE OF CALIFORNIA

NO.	DESCRIPTION	BY:	DATE:

PREPARED FOR:
BIG WAVE LLC

EROSION / SEDIMENTATION CONTROL AND DUST CONTROL PLAN

BIG WAVE WELLNESS CENTER
AIRPORT STREET
PRINCETON BY THE SEA SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	AAP
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"= 30'
DATE:	05/17/10
DRAWING NO.	1584-00
SHEET	C-3

W:\Projects\Proj-00\1584-00\4-gradingplan_2\1584-VESTING_UPDATE.dwg

MODIFICATION TO AIRPORT DESIGN STANDARDS TABLE

DEVIATION DESCRIPTION	EFFECTED DESIGN STANDARD	EXISTING	PROPOSED DISPOSITION	APPROVAL DATE
Obstructions	*F.A.R. Part 77*	*See Sheet 4*	*See Sheet 4*	--

SUBMITTED BY:
Coffman Associates
FOR APPROVAL BY:

APPROVED BY: _____ ON THE DATE OF: 7/10/06
Mark Larsen
Airport Manager

FAA APPROVAL STAMP

APPROVED CONDITIONALLY
FEDERAL AVIATION ADMINISTRATION
AIRPORTS DISTRICT OFFICE
SAN FRANCISCO, CALIFORNIA
By _____ Date 10/3/06
ACTING Manager
Subject to Letter dated 10/3/06

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVIGATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
BRL	BRL	*BUILDING RESTRICTION LINE (BRL)*
		OBJECT FREE AREA (OFA)
		RUNWAY SAFETY AREA (RSA)
		OBSTACLE FREE ZONE (OFZ)
		DIRT ROAD
		FACILITY CONSTRUCTION
		FENCING
PAPI-2	PAPI-2	*NAVIGATIONAL AID INSTALLATION*
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
34.15 / 16.34	34.15 / 16.34	*SECTION CORNER*
		SEGMENTED CIRCLE/LIGHTED WIND TEE
1080	1080	*TOPOGRAPHIC CONTOURS*
		WIND INDICATOR (Lighted)
A	A	*AIRPORT CONTROL STATIONS (SURVEY)*

RUNWAY DATA

	RUNWAY 12-30	
	EXISTING	ULTIMATE
RUNWAY CATEGORY/AIRCRAFT DESIGN GROUP	*B-II*	*SAME*
CRITICAL DESIGN AIRCRAFT	*SUPER KING AIR B200*	*SAME*
WINGSPAN OF DESIGN AIRCRAFT	*54.5'*	*SAME*
APPROACH SPEED OF DESIGN AIRCRAFT (KNOTS)	*103*	*SAME*
MAXIMUM TAKE OFF WIEGHT (lbs)	*12,500lbs (s)*	*SAME*
RUNWAY AZIMUTH	*138.00/318.00*	*SAME*
RUNWAY BEARING (TRUE)	*N42°W*	*SAME*
RUNWAY DIMENSIONS	*5,000' X 150'*	*SAME*
ELEVATION OF RWY. TOUCH DOWN ZONE (MSL)	*66.3'/51.0'*	*SAME*
ELEVATION OF RUNWAY HIGH POINT (above MSL)	*66.3'*	*SAME*
ELEVATION OF RUNWAY LOW POINT (above MSL)	*32.5'*	*SAME*
WIND COVERAGE IN MPH	*12.1-99.35%/15-99.76%*	*SAME*
APPROACH VISIBILITY MINIMUMS	*VISUAL/VISUAL*	*SAME*
FAR PART 77 CATEGORY	*VISUAL/VISUAL*	*SAME*
RUNWAY INSTRUMENTATION	*VISIAL/VISIAL*	*SAME*
RUNWAY APPROACH SURFACES	*20:1/20:1*	*SAME*
RUNWAY THRESHOLD DISPLACEMENT	*763'/763'*	*NONE*
RUNWAY STOPWAY	*NONE*	*NONE*
RUNWAY SAFETY AREA WIDTH (RSA)	*150'*	*SAME*
RSA DISTANCE BEYOND EACH RUNWAY END	*300'/300'*	*SAME*
RUNWAY OBJECT FREE AREA WIDTH (OFA)	*500'*	*SAME*
OFA DISTANCE BEYOND EACH RUNWAY END	*200'/200'*	*SAME*
RUNWAY OBSTACLE FREE ZONE WIDTH (OFZ)	*400'*	*SAME*
OFZ DISTANCE BEYOND EACH RUNWAY END	*200'/200'*	*SAME*
LINE OF SITE REQUIREMENT	*NO*	*SAME*
RUNWAY PAVEMENT MATERIAL	*ASPHALT*	*SAME*
RUNWAY PAVEMENT SURFACE TREATMENT	*NONE*	*SAME*
PAVEMENT STRENGTH (in thousand lbs.)	*12.5(S)*	*SAME*
RUNWAY EFFECTIVE GRADIENT (in %)	*0.007%*	*0.13%*
MAXIMUM GRADIENT (in %)	*2%*	*SAME*
RUNWAY LIGHTING	*MIRL*	*SAME*
RUNWAY MARKINGS	*NON-PREC./NON-PREC*	*SAME*
RUNWAY APYROACH LIGHTING	*NONE*	*SAME*
TAXIWAY PAVEMENT MATERIAL	*ASPHALT*	*SAME*
TAXIWAY LIGHTING	*MITL*	*SAME*
TAXIWAY MARKING	*CENTERLINE, HOLDLINES*	*SAME*
DISTANCE FROM RWY. CL TO HOLD BARS	*170'*	*SAME*
VISUAL AIDS	*VASI (30) REIL (30)*	*PAPI-2/PAPI-2 REIL (30)*
NAVIGATIONAL AIDS	*GPS/GPS*	*SAME*

[1] Pavement strengths are expressed in Single(S), Dual(D), Dual Tandem(DT), and/or Double Dual Tandem(DDT) wheel loading capacities.

LOCATION MAP

NOT TO SCALE

BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION	EL.
1	--	*ADMINISTRATION/TERMINAL BUILDING*	*67.2'*
2	--	*FIXED BASE OPERATION HANGAR (Half Moon Bay Aero)*	*72.7'*
3	--	*FIXED BASE OPERATION HANGAR (West Coast Aviation Co.)*	*78.3'*
4	*4*	*T-HANGAR*	*62.8'/62.8'*
--	*5*	*CONVENTIONAL HANGAR*	--
6	--	*COMMUNICATIONS TOWER*	*64.8'*
7	--	*FUEL STORAGE FACILITY (Aboveground)*	--
8	*8*	*AUTO PARKING*	--
9	*9*	*TRANSIENT AIRCRAFT PARKING*	--
10		*AIRCRAFT WASH RACK*	

RUNWAY END COORDINATES (NAD 83)		EXISTING/DISPLACED	ULTIMATE
RUNWAY 12	*Latitude*	*N37°31'00.9900"*	*N37°31'06.4218"*
	Longitude	*W122°30'19.0000"*	*W122°30'25.3737"*
RUNWAY 30	*Latitude*	*N37°30'35.8201"*	*N37°30'30.3128"*
	Longitude	*W122°29'49.4611"*	*W122°29'42.9993"*

GENERAL NOTES:

1. Base Map and Contours derived from April 14, 2005 aerial photography and planametric mapping, surveyed by Towill Inc..
2. Source for existing runway end/displaced threshold coordinates, runway end/displaced threshold elevations: ASIS Datasheet Systems at www.cvnwww.jccbi.gov/datasheet.
3. All elevations are NAVD 88.
4. Airport has been surveyed in accordance with FAA standard 405.
5. Airport Property Line information provided by the San Mateo County (October 1999)
6. Airport Property Line
7. No threshold siting surface object penetrations.
8. Airport No OFZ object penetrations.
9. New security fencing and access gates will be installed at locations to be determend at a later date.
10. The Building Restriction Lines (BRL) are set for the ultimate runway conditions. The BRL's encompass the runway protection zones, the runway object free area, the runway visibility zone, Navaid critical areas and areas required for terminal instrument procedures. The established BRL is an estimate of the minimum distance to the runway for an object for an object 15 feet in height. Prior to constructing any building or object on the airport, a F.A.R. Part 77 obstruction analysis should be conducted.

Magnetic Variance
14° 39' East (July 2006)
Annual Rate of Change
00° 05' West (July 2006)

SCALE IN FEET
0 300 600 900

SOURCE:
NOAA National Climatic Center
Asheville, North Carolina
San Carlos Airport (SQL)
San Carlos, California

OBSERVATIONS:
46,255 AIII Weather Observations
1995-2004

ALL WEATHER WIND COVERAGE

Runways	10.5 Knots 12 MPH	13 Knots 15 MPH	16 Knots 18 MPH	20 Knots 23 MPH
Runway 12-30	*91.00%*	*96.13%*	*99.12%*	*99.86%*

ALL WEATHER WINDROSE

AIRPORT DATA

HALF MOON BAY AIRPORT (HAF)

CITY: HALF MOON BAY		*COUNTY: SAN MATEO, CALIFORNIA*	
RANGE: R 6W	*TOWNSHIP: T 5S*	*CIVIL TOWNSHIP: N/A*	
		EXISTING	ULTIMATE
AIRPORT SERVICE LEVEL		*GENERAL AVIATION*	*SAME*
AIRPORT REFERENCE CODE		*B-II*	*SAME*
AIRPORT ELEVATION		*66.3' MSL*	*SAME*
MEAN MAXIMUM TEMPERATURE OF HOTTEST MONTH		*62°F (July)*	*SAME*
AIRPORT REFERENCE POINT	*Latitude*	*N37°30' 49.4000"*	*SAME*
(ARP) COORDINATES (NAD 83)	*Longitude*	*W122°30'04.2000"*	*SAME*
AIRPORT and TERMINAL NAVIGATIONAL AIDS		*ROTATING BEACON* -- -- --	*ROTATING BEACON AWOS III* -- -- --

No.	REVISIONS	DATE	BY	APP'D.
--	--	--	--	--
1	FAA ALP APPROVED	12-19-2006	WH	KM

HALF MOON BAY AIRPORT
AIRPORT LAYOUT DRAWING
HALF MOON BAY, CALIFORNIA

PLANNED BY: *James M. Harris P.E.*
DETAILED BY: *Maggie Beaver*
APPROVED BY: *James M. Harris P.E.*
July 7, 2006 SHEET 1 OF 8

Coffman Associates
Airport Consultants
www.coffmanassociates.com

Figure K of FEIR

IV. MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
AESTHETICS					
Impact AES-4	***Mitigation Measure AES-4: Create a New Source of Substantial Light or Glare which would Adversely Affect Day or Nighttime Views in the Area.*** • Prior to the approval of final project plans, a detailed lighting plan shall be submitted to San Mateo County for review and approval, consistent with their requirements. The lighting plan shall prohibit light spillover across property lines and limit lighting to the minimum necessary for security and exterior lighting purposes, as determined by the Community Development Director. All lighting shall be designed to be compatible with surrounding development. The project shall not propose light sources that are atypical of the surrounding environment. • Reflective glass or other glaring building materials shall be discouraged. The exterior of the proposed building shall be constructed of non-reflective materials such as, but not limited to: high-performance tinted non-reflective glass, metal panel, and pre-cast concrete or cast in-place or fabricated wall surfaces. The proposed materials shall be reviewed and approved by the Community Development Director prior to approval of the Final Map.	Pre-construction/ Construction	Applicant/Contractor	Planning and Building Department	Planning and Building Department
AIR QUALITY					
Impact AQ-2	***Mitigation Measure AQ-2: Construction Emissions.*** The applicant shall require the construction contractor to implement a dust control program. The program shall be applied to all construction activities involving grading, excavation, and use of unpaved areas for staging, extensive hauling of materials, or building demolition. The dust control program shall include the following measures: • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads to 15 miles per hour (mph). • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. • Install wheel washers for all existing, or wash off the tires or tracks of all trucks and equipment leaving the site. • Limit the area subject to excavation, grading, and other construction activity at any one time.	Pre-Construction/ Construction	Applicant/Contractor	Planning and Building Department/BAAQMD	Public Works Department/ Planning and Building Department
Impact AQ-5	***Mitigation Measure AQ-5: Sewage Treatment Odors.***	Pre-Construction	Applicant/Contractor	Planning and Building Department/RWQCB	Public Works Department/ Planning and Building

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	The project applicant shall provide supporting engineering calculations and site plan details to verify the basis of design for the odor removal system. This information shall be supplied as part of the engineering report to be submitted for review and approval by the RWQCB.			Department/RWQCB	Department
BIOLOGICAL RESOURCES					
Impact BIO-1a	***Mitigation Measure BIO-1a: Special-Status Species.*** A qualified biologist (hereafter, biological monitor), capable of monitoring projects with potential habitat for Western pond turtle (WPT), San Francisco garter snakes (SFGS), and California red-legged frogs (CRLF) shall be present at the site as follows: 1. Prior to and within 3 days of installation of exclusion fencing (type to be determined through consultation with CDFG and USFWS), the monitor shall survey the location for the installation for the presence of WPT, SFGS and CRLF. In addition, should any burrows be observed, the burrows shall be inspected by the biologist to determine if it is being used by any of the species. Should any of these species be observed, the area shall be vacated and reinspected in one week. If no animal use is noted, the burrows shall be carefully excavated using a small trowel or shovel. Careful prodding using a blunt object will aid in determining the course of the tunnel such that the tunnel is excavated from the sides rather than the top, reducing the potential for any injury should an animal be present. Excavated burrows with no WPT, CRLF or SFGS shall be left open so they cannot be re-occupied. If any nonlisted species are located, they shall be translocated outside of the construction zone. Should any individual WPT, CRLF or SFGS be found during the field survey or excavation, the area where that individual has been found shall remain undisturbed. If any life stage of the WPT, SFGS or CRLF is found during these surveys or excavations, the Department of Fish and Game and the US Fish and Wildlife Service shall be contacted immediately, and activities that could result in take shall be postponed until appropriate actions are taken to allow project activities to continue. 2. During installation of construction zone exclusion fencing, the biological monitor shall be present and will oversee the installation of all construction fencing. The exclusionary fencing shall be installed on one parcel site first so that if any animals are within the construction zone, they will have the opportunity to move out of the area freely. Immediately following installation of exclusion fencing, the biological monitor shall survey the enclosed construction zone for the presence of WPT, SFGS and CRLF. If any life stage of the SFGS or CRLF is found during these surveys, the Department of Fish and Game and the U.S. Fish and Wildlife Service shall be contacted immediately, and activities that could result in take shall be postponed until appropriate actions are taken to allow project activities to continue. The biological monitor shall be present at all times during restoration area planting activities outside the construction zone and within the buffer area, to monitor for the presence of WPT, SFGS and CRLF. The biological monitor shall prepare a training document in both English and Spanish about the animals of concern, their identification, and the methods of avoidance and reporting requirements and procedures, should the species be observed. The document shall provide photographs of the species and notification numbers for the monitor, the Department of Fish and Game, and the U.S. Fish and Wildlife Service. The training document and contact information for the monitor shall be posted at the construction zone and maintained in the monitoring log. Every contractor, sub-contractor and construction worker shall be provided a copy of the training document in advance of their respective construction activities and shall be required to adhere to its contents. A highly visible warning sign shall be installed along the project perimeter. The warning sign shall be in English and Spanish and shall state: “Stay Out -Habitat Area of Federally Protected Species.” A document drop shall be attached to several warning signs and stocked with a supply of training documents.	Pre-Construction/ Construction	Applicant/Botanist/ Contractor	Planning and Building Department/CDFG/USFWS	Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	The biological monitor shall conduct weekly site visits when construction is occurring to verify that all construction zone exclusionary fencing is in place and functioning as intended. Any repair or maintenance to the fencing deemed necessary by the biological monitor shall be completed under the monitor's supervision. Such maintenance activities include adequate removal of vegetation at the construction fence line to ensure that vegetation "ladders" for species access are not allowed to establish. Once restoration activities are complete, the exclusion fencing shall be removed under the supervision of the biological monitor. Prior to the removal of the buffer area/restoration area fencing, permanent exclusionary measures shall be put in place to prevent special-status species movement beyond the buffer areas. Wildlife movement through the site shall be facilitated via a buffer zone on either side of the drainage that bisects the parcels. The general contractor shall assign a crew member that will be responsible for conducting site inspections, monitoring gate opening and closing, and assuring that other species protection measures are in place and being enforced when the Biological Monitor is not present. The crew member shall adhere to the procedures contained in the training document and shall be able to contact the biological monitor should any violations be noted or listed species observed onsite. The biological monitor has the authority to halt all or some construction activities and or modify all or some construction methods as necessary to protect habitat and individual sensitive species. The monitor shall be responsible for contacting USFWS should any endangered or threatened species be observed within the construction zones. The biological monitor shall complete daily monitoring reports for each day present, to be maintained in a monitoring log-book kept onsite. Reports must contain the date and time of work, weather conditions, biological monitor's name, construction or project activity and progress performed that day, any listed species observed, any measures taken to repair and or maintain fencing, and any construction modifications required to protect habitat. The monitoring log-book with compiled reports shall be submitted to the Executive Director upon cessation of construction as part of a construction monitoring report.				
Impact BIO-1b	***Mitigation Measure BIO-1b: Special-Status Species.*** Any active bird nests in the vicinity of proposed grading shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading and tree removal during the non-nesting period (September through February), or if this is not feasible, by conducting a preconstruction nesting bird survey. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following: If grading is scheduled during the active nesting period (March through August), a qualified wildlife biologist shall conduct a pre-construction nesting survey no more than 30 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with CDFG and implemented to prevent nest abandonment. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A nest-setback zone shall be established via consultation with CDFG and USFWS, within which all construction-related disturbances shall be prohibited. The perimeter of the nest-setback zone shall be fenced or adequately demarcated, and construction personnel restricted from the area. If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from the nest are foraging independently and capable of independent survival at an earlier date. A survey report by the qualified biologist verifying that the young have fledged shall be submitted	Pre-Construction/ Construction	Applicant/Botanist/ Contractor	Planning and Building Department/CDFG/USFWS	Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	to CDFG and USFWS prior to initiation of grading in the nest-setback zone.				
Impact BIO-1c	***Mitigation Measure BIO-1c: Special-Status Species.*** Proposed project construction activities will not result in impacts to project area wetlands and/or habitat for special-status species known to occur in the vicinity of the site. The applicant's biologist has obtained a verified wetland delineation and has consulted with the regulatory agencies regarding special-status species. The applicant shall continue to coordinate all project activities potentially regulated by State, Federal, and local agencies and shall obtain all necessary permits from CDFG, Corps, USFWS, and the RWQCB as required by federal and State law to avoid, minimize or offset impacts to any species listed under either the State or federal Endangered Species Acts or protected under any other State or federal law.	Pre-Construction/ Construction	Applicant/Botanist/ Contractor	Planning and Building Department/CDFG/Corps/ USFWS/RWQCB	Planning and Building Department
Impact BIO-1d	***Mitigation Measure BIO-1d: Special-Status Species.*** Sensitive and general habitat features outside the limits of approved grading and development shall be protected by identifying a construction and development boundary on all project plans and prohibiting construction equipment operation within this boundary. The boundary shall be staked and flagged in the field with a highly visible color coded system and all construction and equipment operators shall be instructed to remain outside this no-disturbance boundary for the duration of construction. This measure is in addition to the wildlife exclusion fencing described in Mitigation Measure Bio-1a and applies to the protection of all habitat features outside of the project limits.	Pre-Construction/ Construction	Applicant/Botanist/ Contractor	Planning and Building Department/CDFG/USFWS	Planning and Building Department
Impact BIO-4a	***Mitigation Measure BIO-4a: Wildlife Movement and Habitat Connectivity.*** Measures recommended in Mitigation Measures BIO-1a through BIO-1d would serve to protect important natural habitat on the site for wildlife, avoid the potential loss of bird nests, and protect sensitive natural areas. Although wildlife movement and habitat connectivity impacts were found to be less than significant, the following additional provisions shall be implemented to further protect wildlife habitat resources: Fencing that obstructs wildlife movement shall be restricted to building envelopes and wildlife exclusionary fencing along special-status species protection corridors and shall not be allowed elsewhere on the site. Fencing that obstructs wildlife movement contains one or more of the following conditions: lowest horizontal is within 1.5 feet of the ground OR highest horizontal is over 6 feet OR top or bottom wire is barbed OR distance between top wires is less than 10 inches OR it combines with existing structures or fences, even on neighboring parcels, to create an obstacle to wildlife movement. Lighting shall be carefully designed and controlled to prevent unnecessary illumination of natural habitat on the site. Lighting shall be restricted to building envelopes, at the minimum level necessary to illuminate roadways and other outdoor areas. Lighting shall generally be kept low to the ground, directed downward, and shielded to prevent illumination into adjacent natural areas. Dogs and cats shall be confined to individual residences and the fenced portion of the building envelopes to minimize harassment and loss of wildlife. All garbage, recycling, and composting shall be kept in closed containers and latched or locked to prevent wildlife from using the waste as a food source.	Construction/ Operation	Applicant/Botanist/ Contractor	Planning and Building Department	Planning and Building Department
CULTURAL RESOURCES					
Impact CULT-2a	***Mitigation Measure CULT-2a: Archaeological Resources.*** All final improvements for the proposed project shall be designed and approved by County staff, as well as a County-approved qualified archaeologist, to avoid impacts to prehistoric archaeological site CA-SMA-151 due to the proposed development. To avoid impacts to CA-SMA-151, the archaeological site shall be excluded from disruption during project construction. Avoidance shall be assured by fencing the site perimeter (to be confirmed by a County-	Pre-Construction/ Construction/Operation	Applicant/Archaeologist/ Contractor	Planning and Building Department/Archaeologist	Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	approved qualified archaeologist or licensed surveyor prior to any start of grading) to exclude construction equipment, particularly for grading activities. Fencing shall be removed when all construction activities are finished to avoid drawing attention to the site. Additionally, identified site CA-SMA-151 shall be included in a deed restriction recorded with the County Recorder's Office to further protect this archaeological resource. The deed restriction shall limit uses within the site perimeter of CA-SMA-151 to farming within the existing plow zone and require any ground disturbing activity or development within the cultural site perimeter to be subject to a Coastal Development Permit and meet California Environmental Quality Act (CEQA) requirements for disturbance of a mapped cultural resource. **OR** If avoidance of site CA-SMA-151 is impractical or infeasible, a County-approved archaeologist shall be retained to conduct test excavations at the site to determine the integrity of its subsurface deposit. Additionally, a mitigation plan shall be developed by a County-approved archaeologist that addresses specific project impacts and outlines appropriate mitigation measures. At a minimum, the mitigation plan shall include the following: • Preparation of a research design that outlines regional issues and how they can be addressed through recovery of materials at CA-SMA-151; • Discussion of field, laboratory, and analytical methods; • Expected involvement of the Native American community; • Actions to be taken in the event that human remains are discovered; • Expected schedule for completing mitigation, including submittal of technical report; and • Curation plan for recovered materials. The site may continue to be used for growing crops, provided that no ground disturbing activity such as ripping, plowing, disking, etc. is allowed to extend deeper than the existing plow zone (approximately six inches from the existing grade). However, building on the flake scatter portion of the site would also be allowed as long as the improvements would require no ground disturbing activity below the plow zone. Prior to placing fill materials on top of the area being covered, an archaeological investigation shall be conducted to gather baseline data about the nature of the site.				
Impact CULT-2b	***Mitigation Measure CULT-2b: Archaeological Resources.*** A qualified archaeologist, as determined by the County, and a Native American shall monitor future ground-disturbing activities in the monitoring area north of site CA-SMA-151.	Pre-Construction/ Construction	Applicant/Archaeologist	Planning and Building Department/Archaeologist/ NAHC	Planning and Building Department
Impact CULT-2c	***Mitigation Measure CULT-2c: Archaeological Resources.*** In the event that additional subsurface archaeological resources are encountered during the course of grading and/or excavation, all development shall temporarily cease in these areas until the County Planning Department is contacted and agrees upon a qualified archaeologist to be brought onto the project site to properly assess the resources and make recommendations for their disposition. Construction activities could continue in other areas. If any findings are determined to be significant by the archeologist, they shall be subject to scientific analysis; duration/disposition of archaeological specimens as agreed to by the Native American community, land owner, and the County; and a report prepared according to current professional standards.	Construction/	Applicant/Archaeologist	Planning and Building Department/Archaeologist/ NAHC	Planning and Building Department
Impact CULT-3	***Mitigation Measure CULT-3: Paleontological Resources.*** A qualified paleontologist, as determined by the County, shall monitor future ground-disturbing activities in native soil both onsite and offsite as related to the project. In the event that paleontological resources are discovered during grading and/or excavation, the monitor shall be empowered to temporarily halt or divert construction in the immediate vicinity of the discovery while it is evaluated for significance. Construction activities could continue in other areas. If any findings are determined to be significant by the paleontologist, they shall be subject to scientific analysis,	Construction	Applicant/Archaeologist	Planning and Building Department/Archaeologist	Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	professional museum curation, and a report prepared according to current professional standards.				
GEOLOGY AND SOILS					
Impact GEO-3a	***Mitigation Measure GEO-3a: Seismic-Related Ground Failure.*** The final geotechnical investigation for the project shall evaluate the potential for cyclic densification and develop final mitigation measures, as needed. Potential mitigation measures may include, but are not limited to: (1) overexcavating and replacing loose sandy soil with compacted engineered fill; (2) applying deep soil compaction techniques, such as DDC, RIC, or equivalent soil densification method; and (3) designing building foundations to accommodate total and differential ground settlement resulting from cyclic densification, as well as post-liquefaction settlement and consolidation ground settlement (if applicable).	Pre-Construction	Applicant/Geologist	Planning and Building Department	Planning and Building Department
Impact GEO-3b	***Mitigation Measure GEO-3b: Seismic-Related Ground Failure.*** Additional subsurface exploration using rotary-wash drilling methods and/or CPTs shall be performed to better characterize the subsurface conditions at the sites. Based on the results of subsurface investigation, the potential for soil liquefaction and liquefaction-induced ground failures, such as lateral spreading, post-liquefaction reconsolidation, lurch cracking, and sand boils shall be re-evaluated at the site. The final geotechnical investigation report shall provide mitigation measures for liquefaction-induced hazards. Potential mitigation measures may include: (1) improving the soil with deep soil compaction techniques, such as DDC, RIC, or equivalent method, to reduce the liquefaction potential; (2) buildings supported on stiffened shallow foundations (i.e. footings with interlocking grade beams) bearing on a layer of well-compacted fill; (3) buildings supported on deep foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles); and (4) constructing a structural slab that spans supported between columns.	Pre-Construction	Applicant/Geologist	Planning and Building Department	Planning and Building Department
Impact GEO-4	***Mitigation Measure GEO-4: Total and Differential Settlement.*** Additional subsurface exploration using rotary-wash drilling methods and/or CPTs and consolidation laboratory testing shall be performed to better characterize the subsurface conditions and soil properties at the site. Based on the results of subsurface investigation, total and differential ground settlement due to cyclic densification, post-liquefaction reconsolidation, and consolidation settlement due to building loads and fill placement shall be re-evaluated. The final geotechnical investigation report shall provide mitigation measures for ground settlement. Potential mitigation measures may include: (1) improving the soil with deep soil compaction techniques, such as DDC, RIC, or equivalent method, to reduce the potential for total and differential ground settlement; (2) supporting the buildings on stiffened shallow foundations (i.e. footings with interlocking grade beams) bearing on a layer of well-compacted fill; (3) supporting the buildings on deep foundations such as drilled piers, driven piles or propriety piles (i.e., torque-down piles and auger cast piles); and (4) constructing a structural slab that spans supported between columns. If deep foundations are selected, they shall be designed to accommodate load conditions resulting from post-liquefaction reconsolidation and consolidation due to the placement of new fill (if applicable).	Pre-Construction	Applicant/Geologist	Planning and Building Department	Planning and Building Department
Impact GEO-6	***Mitigation Measure GEO-6: Expansive Soil.*** The final geotechnical investigation shall provide an estimate of differential movement associated with the shrinking and swelling of the existing onsite expansive soil at the site. Mitigation measures for expansive soils may include designing the buildings to be supported on: (1) shallow foundations that rest on a layer of non-expansive engineered fill ; (2) a deepened spread footing system where the proposed footings gain support at or below the depth of significant seasonal moisture fluctuation and the slab-on-grade floor will be supported on a layer non-expansive fill, as described above; (3) a stiffened foundation system, such as a reinforced concrete or post-tensioned mat, that is capable of resisting the differential movement and soil pressures associated with the expansive soil; or (4) a deep foundation system that transfers the building and slab loads to competent soil beneath the near-surface moderately to highly expansive soil layer.	Pre-Construction	Applicant/Geologist	Planning and Building Department	Planning and Building Department
Impact GEO-7	***Mitigation Measure GEO-7: Pervious Pavements and Other Water/Wastewater Infiltration Systems.***	Pre-Construction	Applicant/Geologist	Planning and Building Department	Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	Considering the near-surface soil may consist of moderately to highly expansive clay, special subgrade preparation, and foundation and pavement design recommendations shall be required to prevent the near-surface clayey soil from ponding water, and becoming saturated and weak under the proposed site loading conditions, such as foundation and traffic loads. Final design recommendations for a pervious pavement system shall allow surface water to percolate through the pavement without causing adverse impacts to new pavements and building foundations due to moisture fluctuations in the near-surface expansive clay. Potential mitigation measures may include: (1) collecting and redirecting surface and subsurface water away from the proposed building foundations; (2) using permeable base material within pavement areas; and (3) installing subdrains to collect and redirect water from areas that could adversely impact building foundations and vehicular pavement to a suitable outlet.			Department	Department
Impact GEO-8	***Mitigation Measure GEO-8: Review and Approval of Final Grading, Drainage, and Foundation Plans and Specifications.*** To ensure the applicant's geotechnical consultant is given the opportunity to participate in the final design and construction phases of the project, the applicant's consultant (Registered Geotechnical Engineer and Registered Engineering Geologist) shall review and approve the final grading, drainage, and foundation plans and specifications. Also, upon completion of construction activities, the applicant's consultant shall provide a final statement indicating whether the work was performed in accordance with project plans and specifications, and the consultant's recommendations. All mitigations and final design recommendations shall be reviewed and approved by the County prior to issuance of applicable permits and approval of the Final Map.	Pre-Construction/ Construction	Applicant/Geologist/ Contractor	Planning and Building Department	Planning and Building Department
HAZARDS AND HAZARDOUS MATERIALS					
Impact HAZ-2	***Mitigation Measure HAZ-2: Accidental Release of Hazardous Materials.*** Prior to approval of final development plans, a Phase II Environmental Site Assessment (Phase II ESA) shall be performed at the project site to evaluate whether the recognized environmental conditions identified in the Phase I ESA represent an actual release of hazardous substances to soil or groundwater at the project site. To determine whether hazardous substances have migrated onto the project site from the north or northeast, a groundwater sample shall be collected from the agricultural supply well. The Phase II ESA shall include parameters that may be applied to a health risk assessment and remediation (Site Management Plan) if soil is inappropriate for reuse and required to be transported off the project site. The recommendations of the Phase II ESA shall be incorporated into project plans to the satisfaction of the County and in conformance with applicable regulations.	Pre-Construction	Applicant	Planning and Building Department/RWQCB/CDPH	Public Works Department/ Planning and Building Department
Impact HAZ-3	***Mitigation Measure HAZ-3: Hazards Associated with Airport Operations.*** Prior to approval of final development plans, an avigation easement shall be prepared for the project site, in a form satisfactory to the County Director of Public Works. The ~~a~~vigation~~al~~ easement shall be recorded and shown on the vesting tentative map. With approval of the Wellness Center, it is understood that the Wellness Center property owner(s) and tenants, and their successor's in interest in perpetuity, acknowledge the project's location adjacent to an airport and the noise level inherent in the use. The following statement shall be included in the details of the avigation easement on the recorded Final Map, prior to the issuance of the Certificate of Occupancy for any residential unit at the subject property: "This parcel is adjacent to the Half Moon Bay Airport. Residents on this parcel may be subject to inconvenience or discomfort arising from airport operations, including but not limited to noise associated with aircraft landings, take-offs, in air maneuvers and fly-overs, and on-the-ground engine start-ups and taxiing. San Mateo County recognizes the value of the Half Moon Bay Airport to the residents of this County and seeks to protect airport operations, existing and future, from significant interference and disruption. With approval of the Wellness Center, it is understood on the part of both the Wellness Center property owner(s) and the Half Moon Bay Airport that airport operations shall take precedence and priority over potential noise complaints received from property owners, residents, staff, guests, and others from the Wellness Center. In the event that the Wellness Center resident(s) or property owner(s) express an inability or unwillingness to accept such noise conditions authorized	Construction	Applicant	Planning and Building Department/ALUC	Public Works Department/Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	under the terms of the avigation easement and/or remain unsatisfied with the noise reduction measures being implemented by the airport, the affected resident(s) shall be relocated, with assistance provided by the property owner, to the satisfaction of the Planning and Building Department and/or the Department of Housing. This condition shall be included in all contracts between residents of the Wellness Center and with property owners.				
HYDROLOGY AND WATER QUALITY					
Impact HYDRO-3	***Mitigation Measure HYDRO-3: Alteration of Drainage Patterns Resulting in Increased Erosion or Siltation.*** The applicant shall prepare and submit a SWPPP for the proposed project. The applicant's SWPPP shall identify the BMPs to control erosion and sedimentation and provide for treatment of 80 to 85 percent of post-construction runoff from new impervious areas. Neighborhood- and/or lot-level treatment BMPs shall be emphasized, consistent with San Francisco Bay RWQCB and SMCWPPP guidance for NPDES Phase 2 compliance. These types of BMPs, which may also assist in reducing post-project peak flows, include infiltration basins and trenches, dry wells, rain gardens, on-contour grassy swales, media filters, biofiltration features and grassy swales. BMPs shall be designed in accordance with engineering criteria in the California Stormwater BMP Handbook or other accepted guidance and designs shall be reviewed and approved by the County prior to issuance of grading or building permits. As discussed under Mitigation Measure HYDRO-5, if lot-level BMPs are accepted by SMCWPPP as a suitable control measure, the applicant shall establish a mechanism for enforcement to assure that BMP functioning is being maintained as designed. The applicant has included a detailed maintenance schedule, which includes monthly inspection of system components, annual weeding, annual replanting, bi-annual cleaning of catch basins, bi-monthly parking lot vacuuming, and daily trash pickup in the parking lots. Submittal of a project erosion control plan and SWPPP to San Mateo County for review shall be required as part of the building permit application. The erosion control plan shall include components for erosion control, such as phasing of grading, limiting areas of disturbance, designation of restricted-entry zones, diversion of runoff away from disturbed areas, protective measures for sensitive areas, outlet protection, and provision for revegetation or mulching. The plan shall also prescribe treatment measures to trap sediment once it has been mobilized, at a scale and density appropriate to the size and slope of the catchment. These measures typically include inlet protection, straw bale barriers, straw mulching, straw wattles, silt fencing, check dams, terracing, and siltation or sediment ponds. Other aspects of the SWPPP, especially those related to water quality, are discussed below for other mitigation measures. Landscape plans showing the grassy swales and indicating flow paths shall also be provided.	Pre-Construction/ Construction/Operation	Applicant/Contractor	Planning and Building Department/RWQCB	Public Works Department/ Planning and Building Department
Impact HYDRO-4	***Mitigation Measure HYDRO-4: Alteration of Drainage Patterns Resulting in Increased Flooding.*** The applicant shall submit a drainage report and plans to the County that identify the drainage pathways and the extent of any offsite drainage that flows onsite. How such offsite drainage will be conveyed through the site shall also be detailed. The drainage plan shall provide designs consistent with recognized engineering criteria. The drainage plan shall be reviewed and approved by the County prior to issuance of grading or building permits.	Pre-Construction	Applicant	Planning and Building Department/RWQCB	Public Works Department/ Planning and Building Department
Impact HYDRO-5	***Mitigation Measure HYDRO-5: Surface Water Runoff Quality.*** The applicant shall prepared and submit a comprehensive erosion control plan and SWPPP. Potential construction-phase and post-construction pollutant impacts from development can be controlled through preparation and implementation of an erosion control plan and a SWPPP consistent with recommended design criteria, in accordance with the NPDES permitting requirements enforced by SMCWPPP and the San Francisco Bay RWQCB. The erosion control plan forms a significant portion of the construction-phase controls required in a SWPPP, which also details the construction-phase housekeeping measures for control of contaminants other than sediment, as well as the treatment measures and BMPs to be implemented for control of pollutants once the project has been constructed. The SWPPP also sets forth the BMP monitoring and maintenance schedule and identifies the responsible entities during the construction and post-construction phases. The applicant's SWPPP shall identify the BMPs that will be used to reduce post-construction peak flows to existing	Pre-Construction/ Construction/Operation	Applicant/Contractor	Planning and Building Department/RWQCB	Public Works Department/ Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	levels in all onsite drainages where construction will occur. Neighborhood- and/or lot-level BMPs to promote infiltration of storm runoff shall be emphasized, consistent with San Francisco Bay RWQCB and SMCWPPP guidance for NPDES Phase 2 permit compliance. These types of BMPs, which may also enhance water quality, include infiltration basins and trenches, dry wells, rain gardens, on-contour grassy swales, media filters, and biofiltration features. BMPs shall be designed in accordance with engineering criteria in the California Stormwater BMP Handbook or other accepted guidance and designs shall be reviewed and approved by the County prior to issuance of grading or building permits. The applicant shall prepare a clearly defined operations and maintenance plan for water quality and quality control measures. The design and maintenance documents shall include measures to limit vector concerns, especially with respect to control of mosquitoes. The applicant shall identify the responsible parties and provide adequate funding to operate and maintain stormwater improvements (through a HOA, Geological Hazard Abatement District, CSD, CFD or similar organization). If lot-level BMPs are accepted by the County as a suitable control measure, the applicant shall establish a mechanism for enforcement to assure that BMP functioning is being maintained as designed. The applicant shall also establish financial assurances, as deemed appropriate by the Community Development Director, enabling the County to maintain the stormwater improvements should the HOA or other entity disband or cease to perform its maintenance responsibilities. The SWPPP must also include post-construction water quality BMPs that control pollutant levels to pre-development levels, or to the maximum extent practicable (MEP). To confirm that structural BMPs (e.g., biofiltration features, wet ponds, vegetated swales, constructed wetlands, or media filters) will function as intended, design must be consistent with engineering criteria, as set forth in guidance such as the recently revised California Storm Water BMP Handbook for New and Redevelopment. These types of structural BMPs are intended to supplement other storm water management program measures, such as street sweeping and litter control, outreach regarding appropriate fertilizer and pesticide use practices, and managed disposal of hazardous wastes. The main post-construction water quality enhancement measure indicated by the applicant report is the use of rain gardens (constructed wetlands) to control pollutants. Locations and designs of the stormwater infiltration system should be provided to the County as part of the grading plans during Final Map review. Many of the distributed BMPs that could prove useful to address control of post-project peak flows at the lot- and/or neighborhood level could reasonably be linked with measures to enhance water quality, thereby providing compliance with the NPDES Phase 2 permit requirements as well. For example, downspouts could direct roof runoff to biofiltration features, with percolated stormwater conveyed through subdrains to small infiltration basins or dry wells. Per Technical Memorandum #1 (TM #1), dated May 15, 2009, prepared by Schaaf and Wheeler (included in Appendix H of the DEIR), Stormwater Best Management Practices should serve several hydrologic and water quality functions, including maximizing groundwater recharge, minimizing quantities of stormwater runoff, and reducing pollutant loadings in stormwater runoff.				
Impact HYDRO-6	***Mitigation Measure HYDRO-6: Ground Quality.*** The applicant shall abandon all unused wells on the project site consistent with San Mateo County Department of Environmental Health standards and the standards described in the State of California Department of Water Resources Well Standards (Bulletins 74-81 and 74-90). Any onsite wells left in service should meet CDPH criteria for well protection. The applicant shall prepare, if required by the CDPH or County Department of Health Services, a Drinking Water Source Assessment and Protection (DWSAP) application to identify and protect against potential well contaminants.	Pre-Construction/ Construction/Operation	Applicant/Contractor	Planning and Building Department/CDPH/County Department of Health Services	Public Works Department/ Planning and Building Department
Impact HYDRO-9	***Mitigation Measure HYDRO-9: Exposure to Tsunami and Seiche.*** In areas subject to tsunami and seiche effects, implementing agencies shall, where appropriate, ensure that the project incorporates features designed to minimize damage from a tsunami or seiche. Structures should either be placed at elevations above those likely to be adversely affected during a tsunami or seiche event or be designed to allow swift	Pre-Construction/ Construction/Operation	Applicant/Contractor	Planning and Building Department	Public Works Department/ Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	water to flow around, through, or underneath without causing collapse. Other features to be considered in designing projects within areas subject to tsunami or seiche may include using structures as buffer zones, providing front-line defenses, and securing foundations of expendable structures so as not to add to debris in the flowing waters.				
LAND USE AND PLANNING					
Impact LU-2	***Recommended Mitigation Measure LU-2*** The property owner shall work with the California Coastal Commission (CCC) to identify and delineate the CCC's jurisdiction over the project site, subject to CCC review and approval. The property owner shall obtain all necessary approvals from the Coastal Commission prior to the initiation of any development within areas of CCC jurisdiction.	Pre-construction/ Construction	Applicant/Contractor	California Coastal Commission/Planning and Building Department	Planning and Building Department
Impact LU-3	***Recommended Mitigation Measure LU-3*** The applicant shall comply with the following recommendations of the State Department of Transportation, Division of Aeronautics: 1) Federal Aviation Administration (FAA) Advisory Circular 150 /5370-2E "Operational Safety on Airports during Construction" shall be incorporated into the project design specifications 2) in accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace" a Notice of Proposed Construction or Alteration (Form 7460-1) shall be provided if required by the FAA, and 3) the location and type of landscape trees shall be selected carefully so they do not become a hazard to aircraft around the airport.	Pre-construction/ Construction	Applicant/Contractor	Federal Aviation Administration /Planning and Building Department	Planning and Building Department
Impact LU-4	***Recommended Mitigation Measure LU-4*** The applicant shall comply with the recommendations of the County's Coastside Design Review Officer to implement changes to the Office Park buildings that improve consistency with applicable policies of the LCP and the Community Design Manual, prior to the project approval by the Planning Commission.	Pre-construction/ Construction	Applicant/Contractor	Planning and Building Department	Planning and Building Department
NOISE					
Impact NOISE-1	***Mitigation Measure NOISE-1: Construction Noise.*** The construction contractor shall implement measures to reduce the noise levels generated by construction equipment operating at the project site during project grading and construction phases. The construction contractor shall include in construction contracts the following requirements or measures shown to be equally effective: • All construction equipment shall be equipped with improved noise muffling, and maintain the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine isolators in good working condition. • Stationary construction equipment that generates noise levels in excess of 65 dBA Leq shall be located as far away from existing residential areas as possible. The equipment shall be shielded from noise sensitive receptors by using temporary walls, sound curtains, or other similar devices. • Heavy-duty vehicle storage and start-up areas shall be located a minimum of 150 feet from occupied residences where feasible. • All equipment shall be turned off if not in use for more than five minutes. • Drilled piles or the use of sonic or vibratory pile drivers shall be used instead of impact pile drivers. The driving heads of sonic or vibratory pile drivers shall be screened on all sides by acoustic blankets capable of reducing noise levels by at least 15 dBA. • Temporary barriers such as flexible sound control curtains shall be erected between the proposed project and the El Granada Mobile Home Park to minimize the amount of noise during construction. The sound control curtains shall reduce construction-related noise levels at the El Granada Mobile Home Park to less than 80 dBA Leq. • Two weeks prior to the commencement of grading or construction at the project site, notification must be provided to the immediate surrounding offsite residential uses that discloses the construction schedule, including the various	Construction	Applicant/Contractor	Planning and Building Department	Planning and Building Department

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
	types of activities and equipment that would be occurring throughout the duration of the grading and construction periods. • Two weeks prior to the commencement of grading or construction at the project site, an information sign shall be posted at the entrance to each construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive noise levels. The applicant shall rectify all reasonable complaints within 24 hours of their receipt. The County may be required to determine whether a complaint is reasonable and subject to being rectified. Should the applicant consider a complaint to be unreasonable, the applicant shall contact the County Planning Department within 24 hours of the receipt of the complaint to discuss how the complaint should be addressed.				
PUBLIC SERVICES					
Impact PS-1	***Mitigation Measure PS-1: Police Services***. Provide onsite manned security with clear lines of communication to fire and emergency medical response.	Pre-Construction/ Construction/Operation	Applicant/Contractor	Planning and Building Department	Planning and Building Department
Impact PS-2a	***Mitigation Measure PS-2a: Fire Protection Services.*** When there are partial closures, roadblocks, or encroachments to streets surrounding the project site during the grading and construction periods, flagmen shall be utilized to facilitate the traffic flow.	Construction	Applicant/Contractor	Planning and Building Department	Planning and Building Department
TRANSPORTATION/TRAFFIC					
Impact TRANS-1	***Mitigation Measure TRANS-1: Intersection Level of Service and Capacity.*** The property owner shall submit a traffic report to the Community Development Director, at full occupancy of every 60,000 sq. ft. of office space, until full project occupancy, and submit traffic reports bi-annually after full project occupancy. The report shall be signed and stamped by a Professional Transportation Engineer in the State of California and identify the Level of Service (LOS) at the intersection of Cypress Avenue and SR 1, Airport Street & Stanford/Cornell (Study Intersection 3 of DEIR), Broadway & Prospect Way (Study Intersection 2), Prospect Way & Capistrano (Study Intersection 1) and State Route 1 & Capistrano (Study Intersection 8) to evaluate if they maintain a LOS C or better. If Levels of Service fall below existing levels for the intersection of Cypress Avenue and SR1 (LOS C in the AM and LOS D in the PM), the applicant shall coordinate with Caltrans to pay a fair share for the installation of a signal as necessary to ensure that the signal will be installed within 1 year of the date of that report. If traffic reports reveal that the LOS of any of the other intersections listed above fall below LOS C, it shall identify methods for reducing vehicle trips to and from the project site, as well as other roadway or intersection improvements that would result in LOS C or better. The applicant shall implement the measures required by the Department of Public Works and the Planning and Building Department, subject to all necessary permitting and environmental review requirements, within 1 year of the date of that report. In the event that permits required for roadway or intersection improvements are not obtained, the methods for maintaining LOS C or better shall be achieved by reducing vehicle trips to and from the project site.	Operation	Applicant/Contractor	Public Works Department/ Planning and Building Department/CalTrans	Planning and Building Department
Impact TRANS-8	***Mitigation Measure TRANS-8: Construction.*** Prior to issuance of grading permits, the applicant shall also submit a traffic control plan to the County Department of Public Works for review and approval. All staging during construction shall occur onsite.	Pre-Construction/ Construction	Applicant/Contractor	Public Works Department/ Planning and Building Department	Public Works Department/ Planning and Building Department
UTILITIES AND SERVICE SYSTEMS					
	Sewer				

Impact	Required Mitigation Measures	Monitoring Phase	Implementing Party	Enforcement Agency	Monitoring Agency
Impact UTIL-2	***Mitigation Measure UTIL-2: Wastewater Collection System Capacity.*** The applicant shall either: (a) revise the project design to limit the maximum amount of sewage flow to the Granada Sanitary District sewer system to that which can be accommodated by the existing 8-inch sewer line in Stanford Avenue and the Princeton Pump Station; or (b) provide necessary expansion of the capacity of the sewer system to accommodate the addition of the expected maximum sewage flow of 26,000 gpd from the project. Any implementation of Mitigation Measure UTIL-2b would require separate CEQA review and permit review.	Pre-Construction/ Construction	Applicant/Contractor/ Groundwater Consultant	Public Works Department/ Planning and Building Department	Public Works Department/ Planning and Building Department
Impact UTIL-4	***Mitigation Measure UTIL-4: Wastewater Recycling and Disposal Requirements.*** The applicant shall comply with State Health Department and RWQCB requirements for wastewater recycling.	Operation	Applicant	Public Works Department/ Planning and Building Department/State Health Department/RWQCB	Public Works Department/ Planning and Building Department
Impact UTIL-5	***Mitigation Measure UTIL-5: Wastewater and Recycling Water Flow Estimates*** The applicant shall revise the project plans and water budget analysis to correct the inconsistencies in the water recycling assumptions and calculations, and shall use this information to verify: (a) the adequacy of plans for irrigation uses of recycled water; and (b) the sufficiency of the proposed landscape areas for winter season dispersal of all wastewater flow not distributed for toilet flushing. The project's use of treated wastewater for irrigation shall be managed and controlled to prevent changes in existing drainage and hydrology that could adversely impact the biology or hydrology of wetland habitats or result in ponding that could result in health, circulation, or structural stability problems. Prior to Planning approval of any grading permit, the applicant shall submit a report, prepared by a biologist/hydrologist to determine appropriate recycled watering levels for all seasons that is consistent with the above requirement and the revised water budget analysis. The report shall be submitted for review by the Environmental Health Division, RWQCB, and the County Planning Department. Use of recycled water for irrigation shall be monitored for two years by a biologist/hydrologist to adjust water levels as necessary based on actual site conditions.				
Impact UTIL-6	***Mitigation Measure UTIL-6: Creek Crossing by Sewage Pipeline.*** The project applicant shall modify the current plans for sewer connection between the North and South parcels to provide either: (a) re-alignment and profile correction to accommodate a gravity sewer line; or (b) incorporation of a lift station on either the North or South parcel.	Pre-Construction	Applicant	Public Works Department/ Planning and Building Department	Public Works Department/ Planning and Building Department
	<u>Solid Waste</u>				
Impact UTIL-11	***Mitigation Measure UTIL-11: Be Served by a Landfill with Insufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs.*** • To facilitate onsite separation and recycling of construction-related wastes, the contractor(s) shall provide temporary waste separation bins onsite during construction. These bins shall be emptied and recycled accordingly as a part of the project's regular solid waste disposal program. • The applicant shall prepare and submit a facility recycling program for the collection and loading of recyclable materials prepared in response to the California Solid Waste Reuse and Recycling Access Act of 1991 as described by the CIWMB, Model Ordinance, Relating to Areas for Collecting and Loading Recyclable Materials in Development Projects, March 31, 1993. Adequate space or enclosures for recycling bins shall be provided at appropriate locations to promote recycling of paper, metal, glass, and other recyclable material.	Construction/Operation	Applicant	Planning and Building Department/Environmental Health Services	Planning and Building Department

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