2120 Delaware Mixed-Use Project

Final Environmental Impact Report

SCH#: 2007012097

Prepared for
The City of Santa Cruz
June 2008

RBF CONSULTING

FINAL ENVIRONMENTAL IMPACT REPORT

2120 DELAWARE MIXED USE PROJECT

SCH# 2007012097

LEAD AGENCY:
City of Santa Cruz

PREPARED FOR:
City of Santa Cruz
Planning & Community Development Department

PREPARED BY:
RBF Consulting

In association with
City of Santa Cruz
Planning & Community Development Department

June 2008

TABLE OF CONTENTS

1 RESPONSE TO COMMENTS 1-1

1.1 Introduction 1-1
1.2 List of Commenters 1-2
1.3 Master Responses 1-12
1.3.1 Traffic and Transportation 1-12
1.3.2 Public Service and Utilities 1-13
1.3.3 CEQA Considerations 1-17
1.4 Response to Comments 1-28

2 REVISIONS TO THE DRAFT EIR 2-1

APPENDICES:

Appendix C Project Design Guidelines

Appendix I Soil Sampling Plan for Persistent Pesticides

1 RESPONSE TO COMMENTS

1.1 Introduction

The 2120 Delaware Mixed-Use Project Draft Environmental Impact Report (Draft EIR) was circulated for a 45-day public review period from March 17 through April 30, 2008, consistent with CEQA regulations and guidelines. Copies of the document were distributed to the State Clearinghouse, regional and local agencies, and interested organizations and individuals, for their review and comment.

Section 15088 (a) of the State California Environmental Quality Act (CEQA) Guidelines states that:

> The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The lead agency shall respond to comments received during the noticed comment period and any extension and may respond to late comments.

In response to the State Guidelines, the City of Santa Cruz Planning Department has evaluated the comments received on the Draft EIR. Written responses to the comments related to environmental issues are included in this Final EIR.

Section 1.2, below, provides a list of all those who submitted comments on the Draft EIR during the public review period. Section 1.3 contains master responses for similar comments for which answers could be grouped together. Section 1.4 contains all of the comments received on the Draft EIR along with responses to each. These responses include identifying where text revisions in the Draft EIR are made in as a result of the comments and responses. Text changes resulting from comments on the Draft EIR are presented in Chapter 2, *Revisions to the Draft EIR*, by chapter and section. Revisions to the Draft EIR text are indicated by <u>underline</u> for new text and ~~strikeouts~~ for deleted text.

This Final EIR document in conjunction with the Draft EIR, dated June 2008, constitutes the Final EIR for the project.

1.2 List of Commenters

All commenters on the Draft EIR are listed in the Table 1-1 below. Each comment is identified with a two part numbering system. The first number corresponds to the number assigned to the comment letter. The second number corresponds to the comment identified within the letter. For example, comment 1-1, refers to the first comment in the letter from the California Coastal Commission.

Table 1-1: List of Commenters

Letter	Commenter	Date	Number	Topic	Master Response
	Federal Agencies				
	None				
	State Agencies				
0	California Governor's Office of Planning and Research	May 1, 2008	0-1	Compliance with State Clearinghouse Review	
1	California Coastal Commission	April 30, 2008	1-1	General Statement - Jurisdictional	
			1-2	Biological Resources – Riparian Setback	
			1-3	Biological Resources – 4.8-1a MM Support	
			1-4	Biological Resources – Arroyo Seco Creek	
			1-5	Biological Resources – Arroyo Seco Creek	
			1-6	Hydrology and Water Quality – Low Impact Development	
			1-7	Hydrology and Water Quality – Best Management Practices	
			1-8	Cumulative Impacts – Global Warming	CUM-1
			1-9	Traffic and Transportation – Railroad Right-of-Way	
			1-10	Traffic and Transportation – Parking	
			1-11	Water Supply	WS-1
			1-12	Water Supply – Correction	WS-1
2a	California Regional Water Quality Control Board – Central Coast Region	April 29, 2008	2a-1	Hazardous Materials – PCE Plume	
			2a-2	Hazardous Materials – Permits Required	
2b	California Regional Water Quality Control Board – Central Coast Region	May 15, 2008	2b-1	Hydrology and Water Quality – Vortechnics Vortex Separators	
			2b-2	Hydrology and Water Quality – Control of Post-construction Urban Runoff	
			2b-3	Hydrology and Water Quality – Incorporation of Low Impact Development Methods	
			2b-4	Hydrology & Water Quality – Phase II Municipal Storm Water Permit (General Permit)	
			2b- 5	Hydrology and Water Quality – Cost/Benefit Rational for LID vs. BMPs	
3	Department of Toxic Substances Control	April 21, 2008	3-1	Hazardous Materials – Phase 1 Adequacy	
			3-2	Hazardous Materials – Phase 2 Recommendation	
			3-3	Hazardous Materials – DTSC Assistance	
4	Department of Transportation	April 29, 2008	4-1	Coordination with Local Jurisdictions	
			4-2	Traffic and Transportation – "Responsible Charge"	
			4-3	Traffic and Transportation –Mission Street / Swift Street	
			4-4	Traffic and Transportation – Highway 1/Highway 9	
			4-5	Traffic and Transportation – Highway 1 and Highway 17	
5	Public Utilities Commission	April 23, 2008	5-1	Traffic and Transportation – Railroad Safety	
			5-2	Traffic and Transportation – CPUC Jurisdiction	

Letter	Commenter	Date	Number	Topic	Master Response
	Local Agencies				
6	Association of Monterey Bay Area Governments	April 14, 2008	6-1	Board of Directors Consideration	
7	City of Santa Cruz Panning Commission	April 3, 2008			
	Commissioners' Comments				
	Kasparovitz		7-1	Alternatives – Alternatives Summary	
			7-2	Environmental Analysis – Impacts per Phase	
			7-3	General Statement – Live/Work Balance	
	Quartararo		7-4	Alternatives – Alternatives Summary and Phasing	
	Foster		7-5	Public Service & Utilities – Schools	
			7-6	Public Service & Utilities – School Impacts	
	Tustin		7-7	Playground	
	All Commissioners		7-8	Transportation and Traffic – Use of Rail Corridor	
			7-9	Public Service & Utilities – Public Comments	
	Public Hearing Comments				
	Fred Geiger – Santa Cruz for Responsible Planning		7-10	Traffic and Transportation – Project Impacts and Neighborhood Impacts	
			7-11	Traffic and Transportation – Cumulative Impacts	
			7-12	Traffic and Transportation – Parking Deficiency	T-1
			7-13	Water Supply – City Liability	
			7-14	Alternatives – Support for Alternative 3	
	Reed Searle		7-15	Traffic and Transportation – Neighborhood Traffic Impacts	
	(Note: Mr. Searle is referred to as Mr. Cheryl in the transcript due to the recorder's mistake)		7-16	Traffic and Transportation – Cumulative Impacts vs. SCCRTC Calculations	
			7-17	Traffic and Transportation – Cumulative Impacts	
8	Monterey Bay Unified Air Pollution Control District	April 30, 2008	8-1	Air Quality – Sensitive Receptors and Health Risk Assessment	
			8-2	Air Quality – Mitigation Measure 4.1-1a	
			8-3	Air Quality – Mitigation Measure 4.1-1a	
			8-4	Air Quality – Impact 4.1-1b, Diesel Exhaust and Acrolein	
			8.5	Air Quality – Consultation with Air District	
			8-6	Air Quality – Mitigation Measure 4.1-2	
9	Santa Cruz County Regional Transportation Commission	April 24, 2008	9-1	General Statement – RTP Goals	
			9-2	Traffic and Transportation – Mitigation Support	
			9-3	Traffic and Transportation – Mission Street/Almar Avenue	
			9-4	Traffic and Transportation – Non-Motorized Travel	
			9-5	Traffic and Transportation – Mission/King and Mission/Chestnut	
			9-6	Traffic and Transportation – Parking MM Support	
			9-7	Traffic and Transportation –Pedestrian/Bike Access to the Railway Right-of-Way	
			9-8	Traffic and Transportation – Transportation Demand Management	

Letter	Commenter	Date	Number	Topic	Master Response
			9-9	General Statement – Building Insulation Support	
			9-10	Traffic and Transportation – Access Driveways	
			9-11	Traffic and Transportation – Bike Racks	
			9-12	Traffic and Transportation – Cross-walk to Transit Stop on Delaware	
			9-13	Traffic and Transportation – Trails and Access	
			9-14	General Statement – Live/Work Balance	
			9-15	Traffic and Transportation – Monterey Bay Sanctuary Scenic Trail	
			9-16	Alternatives – Alternative 1 Support	
			9-17	Traffic and Transportation – Correction	
			9-18	Traffic and Transportation – Correction	
	Private Interests				
10	Stephen K. Cassidy (Cassidy, Shimko, Dawson & Kawakami (for Redtree Properties, LP)	April 30, 2008	10-1	DEIR Adequacy	
			10-2	Project Description – Required Permits	
			10-3	Hydrology and Water Quality – MM Change	
			10-4	Traffic and Transportation – Correction	
			10-5	Project Description – Clarification	
			10-6	Project Description – Lighting Design Guidelines	
			10-7	Project Description – Design Review Process	
			10-8	Project Description – Shared Parking/Special Use Permit	
			10-9	Project Description – Zoning Ordinance Compliance	
			10-10	Project Description/Biological Resources	
			10-11	Project Description – 2005 and 2030 GP Policies	
			10-12	Environmental Analysis – Worst Case Scenario	
			10-13	Air Quality – Mitigation Measure 4.4-1b (Biodiesel)	
			10-14	Air Quality – Mitigation Measure 4.4-1b (Construction Equipment)	
			10-15	Air Quality – Mitigation Measure 4.1-2 (Health Risk Assessment)	
			10-16	Geology and Soils – Current Code Compliance	
			10-17	Geology and Soils – Removal of Mitigation Measure 4.2-1a	
			10-18	Geology and Soils – Dewatering Methodologies	
			10-19	Hydrology and Water Quality – Correction	
			10-20	Acronym Correction	
			10-21	Hydrology and Water Quality – Previous Pavement LID	
			10-22	Project Description – Storm Drain Discharge	
			10-23	Project Description – Trails	
			10-24	Traffic and Transportation – Shared Parking	
			10-25	Traffic and Transportation – Swift/Delaware Fair Share	
			10-26	Traffic and Transportation – Traffic Impact Fee Payment	

Letter	Commenter	Date	Number	Topic	Master Response
			10-27	Traffic and Transportation – Caltrans Level of Service	
			10-28	Project Description – Trails	
			10-29	Traffic and Transportation – Shared Parking	
			10-30	Traffic and Transportation –Parking MM	T-1
			10-31	Traffic and Transportation – Parking Requirements	T-1
			10-32	Traffic and Transportation – Parking Demand	
			10-33	Traffic and Transportation – Excess Parking Impact	
			10-34	Traffic and Transportation – Calibration of Mitigation Measures	
			10-35	Water Supply – Impact Analysis Methodology	WS-1
			10-36	Water Supply – Development Agreement	WS-1
			10-37	Water Supply – Impact Analysis Methodology	WS-1
			10-38	Water Supply – Project Water Demand	WS-1
			10-39	Water Supply – Mitigation Measure 4.6-3a	WS-1
			10-40	Water Supply – Water Mitigation	WS-1
			10-41	Biological Resources – Grading	
			10-42	Cumulative Mitigation Measures	
			10-43	Cumulative Significant Unavoidable Impacts	
			10-44	Cumulative	
			10-45	Cumulative Project List	
			10-46	Cumulative Projects	
			10-47	Cumulative Water Supply Impacts	WS-1
			10-48	Hydrology and Water Quality – LID	
			10-49	Alternative – Alt. 2 Traffic Analysis	
			10-50	Alternative – Alt. 2 Meeting Objectives	
			10-51	Alternative – Alt. 3 Inconsistencies Correction	
			10-52	Alternative – Alt. 3 Traffic Analysis	
			10-53	Alternative – Alt. 3 Meeting Objectives	ALT-1
11	Renwick E. Curry and Nancy C. Knudegard	Not Dated Received on April 30, 2008	11-1	Traffic and Transportation – Mitigation Measure 4.5-2c	
			11-2	Traffic and Transportation – Clarification	
			11-3	Traffic and Transportation –Trip Reduction	
			11-4	Traffic and Transportation – Appendix Exhibit 5	
			11-5	Traffic and Transportation – Appendix Exhibit	
			11-6	Traffic and Transportation – Appendix Exhibit 17 Clarification	
			11-7	Traffic and Transportation – Appendix Exhibit 17 Clarification	
			11-8	Traffic and Transportation – Cumulative Analysis	
			11-9	Traffic and Transportation – Traffic Future Growth	
			11-10	Traffic and Transportation – Appendix Exhibit 17	
			11-11	Traffic and Transportation – Parking Study	
			11-12	Traffic and Transportation – Street Parking Study	
			11-13	Traffic and Transportation – Parking Mitigation	T-1

Letter	Commenter	Date	Number	Topic	Master Response
			11-14	Traffic and Transportation – Traffic Demand Management Enforcement	
			11-15	Traffic and Transportation – Traffic Demand Management Enforcement	
			11-16	Traffic and Transportation – Parking Impact on Businesses	T-1
			11-17	Traffic and Transportation – Parking Reduction Clarification	
			11-18	Traffic and Transportation – Live/Work Parking Clarification	
			11-19	Traffic and Transportation – Appendix Exhibit Correction	
12	Edward J. Davidson	April 3, 2008	12-1	Water Supply – Cumulative Analysis Extent	
			12-2	Cumulative Water Supply	
			12-3	Water Supply Comment	
13	James R. Ellemore	April 30, 2008	13-1	Project Design – Impervious Surfaces	
			13-2	Project Description (Street Layout)	
			13-3	Project Description (Height Limit)	
			13-4	Aesthetics – Project Description (Solar)	
			13-5	Solar Exposure/ Global Warming	
			13-6	Project Comment	
14	Renee Flower	April 27, 2008	14-1	Hydrology and Water Quality – Creek Characterization	
			14-2	Hydrology and Water Quality - General	
			14-3	Hydrology and Water Quality – Creek Impacts	
			14-4	Hydrology and Water Quality – Additional Creek Flow	
			14-5	Hydrology and Water Quality – Curtain Drain Impacts to Creek	
			14-6	Hydrology and Water Quality – Curtain Drain Impacts to Surrounding Vegetation	
			14-7	Hydrology and Water Quality - General	
			14-8	Biological Resources – Creekside Development Setbacks	
			14-9	Hydrology and Water Quality – Additional Creek Flows	
			14-10	Hydrology and Water Quality – Stormwater Facilities	
			14-11	Biological Resources – Creek Setbacks and Fencing	
			14-12	Hydrology and Water Quality – Additional Creek Flows	
			14-13	Hydrology and Water Quality – Water Quality	
			14-14	CDFG Coordination	
			14-15	Coastal Development Permit	
			14-16	Applicant's Presentation	HWQ-2
15	James Gill	April 16, 2008	15-1	Hazardous Materials – Plume	HM-1
			15-2	Public Service & Utilities – Recreation Impacts	PSU-1
16	James B. and Catharine C Gill	April 27, 2008	16-1	General Statement – DEIR and Project Support	
			16-2	Alternatives – Alt. 1 as a Superior Alternative	
			16-3	Public Service & Utilities – Recreation Impacts	PSU-1

Letter	Commenter	Date	Number	Topic	Master Response
			16-4	Public Service & Utilities – Recreation MM Suggestion	
			16-5	Hazardous Materials – Contaminated Water Plume	
			16-6	Hazardous Materials – Monitoring Wells	
			16-7	Hazardous Materials – Contaminated Water Plume	
			16-8	Transportation and Traffic – Construction Traffic MM	
			16-9	Transportation and Traffic – Delaware Unloading	
17	Kathy Haber	March 21, 2008	17-1	Water Supply – Lack of Supplies	WS-1
			17-2	Water Supply – Desalination	WS-1
			17-3	General Statement – Project Position	
18	Ruth Hunter	April 27, 2008	18-1	General Statement – Residential vs. Industrial Uses	
			18-2	Transportation and Traffic – Safety and Access	
			18-3	Public Service & Utilities – Recreation and School Impacts	PSU-1
			18-4	Aesthetics – Visual Character	
			18-5	Impact Determination	
			18-6	Public Service & Utilities – Recreation Impacts	PSU-1
			18-7	Solar Exposure	
			18-8	Aesthetics – Private Views	
19	Bill Malone	April 30, 2008	19-1	Alternatives – Range of Alternatives	ALT-1
			19-2	Transportation and Traffic – Parking Deficiencies	T-1
			19-3	Public Service & Utilities – Recreation Impacts	PSU-1
			19-4	Aesthetics – Neighborhood Compatibility	
			19-5	Public Service & Utilities –Secondary Growth Impacts	
20	Ron Pomerantz	April 30, 2008	20-1	Transportation and Traffic –Impact Analysis	
			20-2	Transportation and Traffic – Cumulative Projects	
			20-3	Transportation and Traffic – Swift/Delaware Pacific Collegiate School Impacts	
			20-4	Transportation and Traffic – Other Swift Intersections	
			20-5	Water Supply – Water Supply Assessment	WS-1
			20-6	Water Supply – Phasing/Priority	
			20-7	Water Supply – Desalination	WS-1
21	Celia Scott, A.I.C.P, Attorney at law	April 30, 2008	21-1	Cumulative – Global Climate Change	CUM-1
			21-2	Environmentally Superior Alternative – Reduction in Traffic Trips	
			21-3	Energy Consumption	
			21-4	Cumulative – Global Climate Change	CUM-1
			21-5	Cumulative – Green House Gases Methodology	CUM-1
			21-6	Cumulative – Global Climate Change	CUM-1
			21-7	Cumulative – Global Climate Change MM	CUM-1
			21-8	Cumulative – Global Climate Change	CUM-1
			21-9	Consistency with General Plan Policies	
			21-10	Public Service & Utilities – Recreation Impacts	PSU-1

Letter	Commenter	Date	Number	Topic	Master Response
			21-11	Land Use – Parks & Recreation Policies Consistency	
			21-12	Transportation and Traffic – Revised Parking Plan	T-1
			21-13	Project Description – Grading	
			21-14	Long-term Impacts on Undeveloped Portions	
			21-15	Water Supply	
			21-16	Alternatives – GHG Quantification	
			21-17	Alternatives – Range of Alternatives	ALT-1
22	H. Reed Searle	April 28, 2008	22-1	Cumulative Impacts	
			22-2	Air Quality – Emissions and Global Climate Change	
			22-3	Transportation and Traffic – Improvements Impacts	
			22-4	Transportation and Traffic – Payment of TIF Fees and Air Emissions	
			22-5	Transportation and Traffic – Mission/Baldwin	
			22-6	Transportation and Traffic – Impacts to Mission Street	
			22-7	Transportation and Traffic – Impacts to Delaware Avenue and Swift Street	
			22-8	Transportation and Traffic – Cumulative Impacts to Mission Street	
			22-9	Transportation and Traffic – Cumulative Projects	
			22-10	Transportation and Traffic – Affects of Cumulative Traffic on Delaware Avenue	
			22-11	Transportation and Traffic –Traffic Distribution	
			22-12	Transportation and Traffic – Clarification of ADT	
			22-13	Transportation and Traffic – Traffic and Overflow Parking on Residential Neighborhoods	Also see T-1
			22-14	Transportation and Traffic - Traffic Impacts to Lower Swift Street	
			22-15	Transportation and Traffic – Impacts to Pacific Collegiate School	
			22-16	Transportation and Traffic – Clarification of Residential vs. Business Traffic	
			22-17	Transportation and Traffic – On-Street Parking Impacts	Also see T-1
			22-18	Transportation and Traffic – Impacts at the Mission Street/Fair Avenue Intersection	
			22-19	Transportation and Traffic – TIF	
			22-20	Transportation and Traffic –Traffic Improvements' Hazards to Pedestrians & Bicyclists	
			22-21	Transportation and Traffic –Highway 1/Highway 9 Clarifications	
			22-22	Transportation and Traffic – Swift Street/Delaware Avenue Roundabout	
			22-23	Transportation and Traffic – Traffic Improvements Affect Private Property	
			22-24	Transportation and Traffic –Trip Distribution	
			22-25	Live/Work Balance	
			22-26	Project Description – Work Requirement	

Letter	Commenter	Date	Number	Topic	Master Response
			22-27	Public Service & Utilities – School Impacts	
			22-28	Aesthetics – Westside Glare Impacts	
			22-29	Aesthetics – Westside Views	
			22-30	Public Service & Utilities - Recreation Impacts	PSU-1
			22-31	General Statement – Economic Impact	
			22-32	Project Description Clarification	
			22-33	Project Description – Easement Requirements	
			22-34	Transportation and Traffic – Access and Safety	
			22-35	Public Service & Utilities – Response Time	
			22-36	Project Description – Lighting Design	
			22-37	Development Agreement	
			22-38	Additional Environmental Review	
			22-39	General Statement – Project Description	
			22-40	Hydrology and Water Quality – Groundwater Impacts	
			22-41	Project Description – Consistency Analysis (Water Quality)	
			22-42	Project Description – Consistency Analysis (Riparian Setbacks)	
			22-43	Project Description – Consistency Analysis (Noise)	
			22-44	Project Description – Clarify Cut/Fill Ratio	
			22-45	Air Quality - Cumulative Construction Air Quality Impacts	
			22-46	Air Quality – Health Risk Assessments	
			22-47	Geology and Soils – Liquefaction	
			22-48	Project Description – Clarify Cut/Fill Ratio	
			22-49	Geology and Soils –Curtain Drain	
			22-50	Geology and Soils – Liquefaction	
			22-51	Traffic and Transportation – Methodology Clarification for the AM and PM Peak Hour	
			22-52	Traffic and Transportation – Parking Correction	
			22-53	Traffic and Transportation – Transit Routes	
			22-54	Traffic and Transportation – Delivery Trucks	
			22-55	Traffic and Transportation – Parking Revisions Public Process	
			22-56	Water Supply –Water Supply Assessment	WS-1
			22-57	Public Service and Utilities – Occupancy Factor	
			22-58	Water Supply – Priority	
			22-59	Water Supply – Priority (Other Projects)	
			22-60	Water Supply – Fruit Trees Water Requirements	
			22-61	Biological Resources – Monarch Butterfly Habitat	
			22-62	Biological Resources – Parking vs. Building Runoff	
			22-63	Cumulative – Secondary Growth Impacts	
			22-64	Project Review – City's Global Warming Action Program Coordinator	

Letter	Commenter	Date	Number	Topic	Master Response
			22-65	Cumulative Analysis – HOV Lanes on Highway One	
			22-66	Traffic and Transportation – Alternative Access at the Northeast Corner of the Lot	
23	H. Reed Searle	May 13, 2008	23-1	Trip Distribution	
24	David J. Terrazas	April 27, 2008	24-1	General Statement – City Responsiveness	Comment Noted
			24-2	Land Use – Project Consistency	
			24-3	Air Quality – MM Suggestion	
			24-4	Traffic and Transportation – MM Roundabout Suggestion	
			24-5	Traffic and Transportation – TIF Suggestion	
			24-6	Hazardous Materials – Transport Routes	

1.3 Master Responses

Master responses have been prepared below to address common issues that have been raised by the various commentors. Master comments are organized by topic. Each master response is coded with letters and numbers. The letters represent the topic discussed and the number identifies specific area discussed. The following Master Responses are provided:

- ❑ Traffic and Transportation: T-1 – Parking Demand and Supply
- ❑ Public Services and Utilities: PSU-1 – Parks and Recreation
- ❑ Public Services and Utilities: WS-1 – Water Supply
- ❑ CEQA Considerations: CUM-1 – Global Climate Change – Cumulative Impacts
- ❑ CEQA Considerations: ALT-1 – Alternatives

1.3.1 Traffic and Transportation

T-1 – Parking Demand and Supply (7-12, 10-30, 10-31, 11-13, 11-16, 19-2, 21-12)

As noted in the DEIR starting on page 4-69, the parking demand for the proposed project would exceed the proposed supply as shown on the project site plans, which was considered a significant impact. Provision of insufficient parking could result in project parking on vicinity streets. The parking analysis presented in the Draft EIR was based on review of City parking requirements and incorporated parking reductions. The DEIR estimates that the proposed project would result in a parking deficit of 305 spaces (see Table 4.5-4 on page 4-70). Using a rate of approximately 300 square feet per space (including half of the back-up distance), this deficiency would require approximately 91,500 square feet (approximately two acres).

Mitigation Measures 4.5-5a requires that the applicant submit a revised site plan that provides sufficient parking. Mitigation measure 4.5-5b requires that the applicant prepare and implement Transportation Demand Management measures to achieve vehicle occupancy goals established in the City's Trip Reduction Program ordinance. These mitigations measures would reduce these impacts to less than significant. Therefore, with adequate on-site parking, no significant offsite impacts are anticipated.

Due to the fact that this is a unique mixed-use project for which there are no comparable projects by which to estimate parking demand, and the fact that the exact mix of land uses would vary based on market demand, the project applicant will be required to revise their site plan to accommodate sufficient parking based on current City requirements as required by mitigation measure 4.5-5a. Following the permitted construction of 260,000 square feet, if the project applicant can demonstrate to the satisfaction of the City by means of an independent parking study, that there is sufficient merit to modify the current parking requirements, the applicant will be allowed to modify their site plan accordingly. To this end, it is the intent of Mitigation Measure 4.5-5a that the parking study be based on actual parking demand experienced on the project site and not theoretical demands that are required by current ordinances. The actual parking demand would then be projected for subsequent buildout of the project site based on anticipated land uses and market demand.

The mitigation requires that a Parking Plan be submitted to reserve onsite land to meet the full parking requirement unless the parking study at 50 percent project buildout indicates that the actual mixed-use development results in a lower parking rate than established by City ordinance. If this is demonstrated the City may revise the parking requirement to reflect actual site conditions. However, until this is demonstrated, the mitigation requires that adequate land be reserved to meet the parking demand reviewed in the EIR, and thus, project parking would be provided onsite. Mitigation Measure 4.5-5a has been revised to provide clarification. See Chapter 2 – Revisions to Draft EIR.

1.3.2 Public Service and Utilities

PSU-1 – Parks and Recreation (7-7, 15-3, 16-3, 18-3, 18-6, 19-3, 21-14, 22-3)

As discussed in the Draft EIR Public Service and Utilities section Impact 4.6-2, the proposed project would result in an increase of 372 new city residents, if the residential component of the project would be maximized. Given the relatively small size of units planned for the project site, it is anticipated that most of the residents would be adults and only 42 school-age children are projected to live in the residential units.

The Santa Cruz General Plan (General Plan) provides a standard of two acres of neighborhood parks and 2.5 acres of community parks per each 1,000 residents within service radius of 3/8 of a mile (approximately 2,000 feet). General Plan program Parks and Recreation 1.8.2 allows an in-lieu fee equal to the dedication and improvement of land may be required where the total land area required falls below three acres. Based on the above estimated population growth related to the project, approximately 1.6 acres would be required, but payment of in-lieu fees are permitted. Even assuming a worst case population of 595 new residents based on the City's average household size of 2.4 persons (which would not occur on the project site with the smaller proposed units), park dedication requirements would be less than 3 acres. The project applicant would be required to pay an in-lieu park fee, in conformance with Section 23.28.020.2 of the City's municipal code, assessed at $3.00 per square foot for each residential dwelling unit. These fees are used by the Parks and Recreation Department in part to maintain existing park and recreational facilities. General Plan Parks and Recreation policy/program 1.8.2 also allows payment of an in-lieu fee where the land area is under three acres.

While the General Plan determined that there is a shortage of parks in the Lower Westside portion of the City, it is not park acreage that is deficient, but rather park distribution. The distribution deficit of the neighborhood parks affects the area from the Circles to West Cliff Drive between Bay Street and Pelton Avenue, east of the project site. Therefore, the proposed project's residents needs would be met by the two neighborhood parks (Derby and Garfield Parks) without creating an acreage deficit or affecting the existing distribution deficit.

In addition, the project proposes the development of a 5-foot wide trail with viewing areas and landscaping within the development setback area for the Arroyo Seco Creek. The trail would extend from Delaware Avenue on the south and terminate onsite prior to the railroad right-of-way on the north. The trail would accommodate some of the project's population passive recreational activities.

The limited level of increase in demand at neighborhood parks within a close walking distance from the project site is not anticipated to result in a substantial deterioration of these facilities. The proposed project- generated residents would also represent a small portion of the overall population expected to use the regional recreational facilities in the area, such as Natural Bridges State Beach and Wilder Ranch State Park, and would not result in a substantial deterioration of these facilities.

WS-1 – Water Supply and Demand (1-11, 7-13, 10-35 through 10-40, 10-46, 10-47 12-2, 17-1, 17-2, 20-5, 20-6, 20-7, 21-19, 22-58, 22-59, 22-60)

A number of comments were received that addressed project water demand, impact significance, and provision of water to serve the project given the uncertainty of future water supplies. The DEIR provides a comprehensive assessment of project water demand and impacts, although a formal "Water Assessment" as required under SB 610 is not required, for reasons explained on page 4-74 of the DEIR.

The DEIR estimates a project water demand of 20 MGY (million gallons per year). The water demand was reviewed and adjusted by the City of Santa Cruz Water Department staff based on water demand estimates provided by the project applicant. The project water demand was estimated based on a City rate of 108 gallons per day (gpd) per residential unit, and represents a worst-case estimate. The applicant has suggested that water use would be lower due to use of water efficient fixtures. Water Department staff have indicated that, indeed, water use could be reduced by 20% with implementation of high-efficiency fixtures.

As discussed in the DEIR, the City currently has a surplus of approximately 300 MGY under normal (non-dry year) conditions, reflecting the fact that the City is not yet fully built out under its current (1990) General Plan. Under existing baseline conditions, then, there would be available water supplies to serve project demand. However, the project will be developed over a period of time (up to 15 years) (i.e., as late as 2023 or 2024). Thus, while the City currently has sufficient water in normal water years to serve the project's full water demand if the project were constructed in full at this time, the City's existing surplus is temporary only, as the City's adopted water plans[1] indicate that, at some point after the year 2015, the City likely will not have adequate water supplies to serve new development consistent with its 1990 General Plan and other foreseeable growth in the City's water service area. Thus, the proposed project's impact related to water demand is related to the timing of the demand rather than the amount of demand. Since adopted City water plans acknowledge this uncertainty after the year 2015, by which time the project is not expected to be fully built out, the DEIR concludes that at some future unknown date, water supplies to serve project buildings that have not been developed may not be available. For this reason, the DEIR concludes that the impact is significant.

This approach is consistent with a recent California Supreme Court ruling (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Ranch Cordova* [2007] 40 Cal.4th 412), in which the court outlined new legal principles regarding how cities and counties, in preparing EIRs for land use plans, should evaluate issues associated with water

[1] These include the Urban Water Master Plan and Integrated Water Plan; see "Water Supply" discussion in the Draft EIR beginning on page 4-73.

supplies. That case requires local lead agencies, among other things, to undertake "a reasoned analysis of the circumstances affecting the likelihood of the water's availability." (40 Cal.4th at p. 432.) Here, the circumstances affecting the availability of water for full build-out of the proposed project include (i) competition for limited supplies from other projects consistent with the 1990 General Plan, (ii) competition from water demands from the University of California campus, which is served with City water, and (iii) the lack of final regulatory approvals for the proposed desalination plant needed to provide water for current demand in dry years and projected demand even in normal years starting sometime after the year 2015. Based on these considerations, the Draft EIR concluded that the water supply associated with the proposed desalination plant is not "reasonably likely" or "reasonably certain" within the meaning of *Vineyard,* and that, as a result, the project would have significant effects related to water supply. Although the project applicant, in its comments on the Draft EIR, argued that this conclusion was too conservative given the City's *present* ability to serve the project site, the City still believes that its original, more conservative approach has merit, in that the approach reflects the reality that at present there is not sufficient water for the project site in addition to growth already contemplated by the 1990 General Plan. (See also Wat. Code, § 10910 et seq. ["SB 610"] (for certain large projects, lead agency must seek information from water provider as to whether the provider has "existing water supply entitlements" sufficient to serve the proposed project "during normal, single dry, and multiple dry year years" along with "existing and planned future uses, including agricultural and manufacturing uses"); and Gov. Code, § 66473.7 ["SB 221"] (prohibits approval of final subdivision maps creating more than 500 residential lots absent a showing of water availability for those new lots "during normal, single dry, and multiple dry year years" and for "existing and planned future uses, including agricultural and manufacturing uses").) Similar considerations apply under cumulative conditions, as existing known pending projects and growth could exceed the remaining water system capacity under normal conditions. Given this situation, and the timing of the project (built out over 15 years), the DEIR concludes that the project's incremental effect would be cumulatively considerable.

One comment suggests analyzing the project's contribution to cumulative effects based on the methodologies used in other EIRs. The methodology for the Delaware Mixed Use Project EIR, however, differs from the methodologies used in EIRs for other projects (i.e., the cited La Bahia and Tannery Arts Center project EIRs) in that those projects would not be developed over an extended period as would the proposed Delaware project. Furthermore, the City's most recent thinking reflects the evolving case law in the area, which includes not only the *Vineyard* decision but also *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2007) 157 Cal.App.4th 149, 158-163.

The DEIR includes mitigation measures to incorporate higher-efficiency water conservation measures. Additionally, future development projects will be required to pay the City's "System Development Charge" at the time of issuance of a building permit. As noted on page 5-24 of the DEIR, this charge is used in part to implement City-wide conservation programs and costs of the planned desalination project identified in City Plans. The applicant's comments on the DEIR indicate that the applicant is committed to incorporating the water-conserving measures into the project as set forth in Mitigation Measure 4.6-3b.

Mitigation Measure 4.6-3a requires the City to review water demand as a part of future project design or building permits, and permits for building construction would not be issued should the City's available water supplies fall short of meeting the required demand at the time the design or building permit application is filed. It should be noted that under these circumstances (i.e., with the City facing limited water supplies), any permit issued by the City would be subject to this review, and as indicated on page 4-96 of the DEIR, the City will have authority to deny water connections if water supplies become limited in the future until such time that a supplemental supply becomes available. Thus, individual building permits would not be issued in the future to undeveloped portions of the project or other projects in the City if water supplies are not available. Since the project is not proposed in specified phases, but rather would be developed over 15 years in accordance to market rate, there is no way to limit development to a defined phase of development. However, Mitigation 4.6-3a ensures that future development components, if not defined "phases," will not be approved if water supplies are not available. This incremental approach to water supply mitigation finds support in the *Vineyard* decision, which approved the concept of "a measure for curtailing development if intended sources fail to materialize," though the court cautioned that such a measure is no substitute for a proper impact analysis. (See 40 Cal.4th at pp. 432, 434)

Approval of the proposed project would not give the development water service priority over other projects in the future. In other words, by approving the project as currently proposed the City would not, in effect, be assigning to the project sufficient water for full build-out. Rather, discrete components of the project, as they are proposed, would compete on a first-come, first served basis with other development being proposed during the same time period, with the City's future water shortage problem going away if and when the desalination facility gains the regulatory approvals needed for construction and operation. Although the applicant has proposed that the project water demand could be allocated and vested to the project as part of the Development Agreement for the project (see Response to Comment 10-37), the draft Development Agreement submitted to the City does not propose to allocate and vest the project's water demand, and City staff does not support such a proposal in any event.

As discussed in the DEIR, the City's adopted Integrated Water Plan and Urban Water Management Plan identify a desalination plant as the City's best option to address City water constraints. As also discussed in the DEIR, the desalination plant would initially provide a supplemental adequate water supply during peak demand periods of a multiple-year drought and could be expanded at a future time to provide additional supply after additional environmental review and permitting. This City selected this water supply option after reviewing many alternative options and finding that the desalination was the best means of addressing strained demand during drought conditions, during which the City already faces substantial shortfalls under current conditions even without any new growth or development. Other alternatives would not have provided the amount of water needed for drought conditions. Thus, construction of a desalination plant is initially intended for supplemental supplies during drought conditions and not to accommodate planned growth in the service area, although it could be expanded in the future as noted above. The City's Urban Water Management Plan indicates that, in addition to pursuing desalination, the City remains open to exploring other water supply alternatives that would not be feasible to develop in the short-term, but may be useful to consider over a 20-year timeframe, such as water recycling. Additionally, the City provides an annual review of water use and trends, and is required by state law to

update the Urban Water Management Plan every five years. Through these efforts, water demand trends and needs within the water service area can be effectively monitored to ensure that other water supply options can be considered and planned as may be needed.

After the end of the public review period, the Applicant submitted to the City suggested changes to Mitigation Measure 4.6-3a. Although City Staff did not agree with all of the suggested modified language, Staff has revised the measure in order to accommodate some of the applicant's concerns and to make the measure better. See Chapter 2 – Revisions to Draft EIR.

1.3.3 CEQA Considerations

CUM-1 – Global Climate Change – Cumulative Impacts (1-8, 13-5, 21-1, 21-3 through 21-8)

Several comments were received regarding analysis of the proposed project's contribution to global climate change. The comments include a request for a quantitative analysis of project greenhouse gas emissions to provide evidence to support the City's conclusion, as set forth in the Draft EIR, that the project's incremental effect is not cumulatively considerable (and thus is not significant in and of itself). Consideration of other project design measures also was requested. The following response explains why such quantitative analysis is not necessary, particularly for a mixed-use, transit-oriented infill project such as the proposed project, and also provides an expanded discussion and clarification of the project's contribution to global climate change as set forth in section 5.3.3 of the Draft EIR (DEIR).

A qualitative assessment of project emissions is included in Section 5.3.3 (Cumulative Impacts) of the DEIR. Background information on global climate change and regulatory efforts and actions also are provided in that section. Both the State and City of Santa Cruz are developing emissions inventories and strategies to reduce greenhouse gas (GHG) emissions to 1990 levels. The Governor's Executive Order S-3-05 and AB 32 (Health & Saf. Code, § 38501 et seq.) both seek to achieve 1990 emissions levels by the year 2020. Executive Order S-3-05 goes even further than AB 32, and requires that by 2050 California's GHG emissions by 80 percent below 1990 levels. AB 32 defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrocarbons, perfluorocarbons, and sulfur hexafluouride.

The California Air Resources Board (CARB) identified 36 "early actions to mitigate climate change in California" in April 2007 as required by AB 32. These actions relate to low carbon and other fuel standards, improved methane capture at landfills, agricultural measures, reduction of hydrocarbons and perfluorocarbons from specified industries, energy efficiency, and a variety of transportation-related actions. The transportation sector accounts for nearly a third of the carbon dioxide emissions in the United States (Urban Land Institute, 2008[2]), and contributes 39% of California's gross GHG emissions, which makes it a key targeted element in the state's efforts.

In accordance with provisions of AB 32, CARB has completed a statewide Greenhouse Gas (GHG) Inventory that provides estimates of the amount of GHGs emitted to, and

---

[2] Reid Ewing, Keith Bartholomew, Steve Winkelman, Jerry Walters, Don Chen. 2008. *Growing Cooler – The Evidence on Urban Development and Climate Change.* Published by The Urban Land Institute.

removed from, the atmosphere by human activities within California. The inventory includes estimates for carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), which are often referred to as the "six Kyoto gases". The current GHG Inventory covers years 1990 to 2004. Based on review of this inventory, CARB approved a 2020 emissions limit in December 2007 of 427 million metric tons, which is equivalent to the 1990 emissions level. A preliminary estimate of approximately 600 million metric tons has been estimated for 2020 without reductions. This number will be reviewed and refined during 2008. However, the preliminary numbers indicate that the difference between 1990 emissions level and ARB's preliminary estimate for 2020 emissions is 172 million metric tons. [3]

The State is in the process of determining levels of reduction and reduction strategies. The State must adopt a "scoping plan" by January 1, 2009, that identifies and makes "recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that [CARB] finds are necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of greenhouse gas emissions by 2020. (Health & Saf. Code, § 38561(a).) The State's reduction strategies focus on:

- Transportation Reductions (including fuel standards and alternative fuels)
- Electricity and Natural Gas Reductions (including building and appliance standards, renewable energy sources and power plant emissions standards)
- Forestry Conservation, Urban Forestry and Other Known Options
- Additional Measures Still to be Determined[4]

Final CARB regulations are not due until January 1, 2011, and will not be operative until January 1, 2012. By the former date, CARB must adopt "greenhouse gas emissions limits and emissions reductions measures . . . to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit[.]" (Health & Saf. Code, § 38562(a).)

The City of Santa Cruz, however, is not waiting until 2012 to begin to take aggressive action to reduce GHG emissions. The City's draft General Plan 2030 goals and policies seek to reduce community-wide GHG emissions by 30% by the year 2020 and 80% by the year 2050 (compared to 1990 levels). The City of Santa Cruz is in the process of preparing Climate Action Plan with an emissions inventory as part of the General Plan update that is in progress. It is estimated that these components will be completed in the summer of 2008.

---

[3] California Air Resources Board. November 16, 2007. "Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit."

[4] California Climate Change Portal. 'Assembly Bill 32 – The Global Warming Solutions Act of 2006." Last Modified 5/2/08. http://www.climatechange.ca.gov/ab32/index.html

As indicated above, the State has not adopted GHG Reduction Strategies or determined thresholds to be applied to individual projects, and the City has not completed emissions inventories, although it has a draft targeted goal of a 30% reduction by the year 2020. In addition, the State CEQA Guidelines have not been updated to provide guidance as it relates to climate change, although Senate Bill 97 (enacted in 2007) requires the Governor's Office of Planning and Research (OPR) to develop CEQA guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions," which must be completed by July 1, 2009, so that they can certified or adopted by the California Resources Agency on or before January 1, 2010. (Pub. Resources Code, § 21083.05.) Under OPR's current schedule, draft guidelines may be available in the fall of 2008. To date, there are no California Court of Appeal or Supreme Court decisions governing the character or extent of climate change analysis required under CEQA.

Currently there is no requirement in statute, regulation, or case law for quantification of GHG emissions on a project level, and there is no universally accepted method to quantify greenhouse gases from a specific development project. Nor is there any requirement for a quantitative significance threshold. A recent publication from the California Air Pollution Control Officers Association (CAPCOA)[5] suggests several possible approaches to evaluating a project's impact to climate change, each of which has its pros and cons. The report considers the application of thresholds, reviews methodologies for quantifying GHG emissions, and inventories mitigation measures that could be applied to development projects. The paper indicates that as the State's GHG reduction program evolves over time, GHG thresholds, policies and procedures for CEQA may undergo significant revisions and that uniform statewide thresholds and procedures may be adopted. These developments have not occurred yet, which is not surprising given that the ARB's regulatory scheme will not be fully operational until the beginning of 2012.

One quantification method suggested in the CAPCOA report to calculate emissions related to project operations is use of the air model URBEMIS, which provides identification of carbon dioxide (CO_2) emissions. This tool is imperfect, however. As indicated on page 5-9 of the DEIR, carbon dioxide is the mostly widely emitted greenhouse gas and is used as a reference for determining greenhouse gas emissions levels. CO_2 is primarily generated by fossil fuel combustion in stationary and mobile sources, and nearly 85% of the California's GHG emissions in 2004 were carbon dioxide. Thus, URBEMIS can identify the majority of GHG emissions, but not all of them. The program accounts for vehicle trips and construction emissions, but does not account for project energy demands or trip reduction measures. Some other programs are referenced for new stationary and area sources/facilities and construction-only projects. The California Climate Action Registry (CCAR) Protocol[6] includes calculations to determine indirect GHG emissions from project energy use.

Based on the above approach, a review of the URBEMIS calculations for the proposed Delaware Mixed-Use Project (see Appendix D of the DEIR) shows an estimated 32,743.96 pounds per day of CO2 emissions during the summer and 9,137 pounds per

---

[5] CAPCOA, January 2008, "CEQA & Climate Change."

[6] California Climate Action Registry. April 2008. "California Climate Action Registry General Reporting Protocol." Version 3.0

day during the winter, which accounts for some area source emissions as well as project operational emissions related to traffic. This is equivalent to approximately 3,700 metric tons per year.

The above estimate provides a general indication of the project's direct operational GHG emissions, but does not include energy use or other indirect emissions. The California Climate Action Registry (CCAR) Protocol[7] also establishes methods for calculating direct mobile and stationary source emissions, indirect emissions from electricity use, direct process emissions, and direct fugitive dust emissions. One EIR comment cited a publication by the Center for Biological Diversity,[8] which recommends quantification based on all direct and indirect emissions, and the comment requests that all project direct and indirect emissions be calculated. Indirect emissions would include elements such as operation of construction vehicles and machinery and manufacture and transportation of building materials. The proposed project is planned to be developed over a 15-year period. Thus, it would be difficult and speculative to try to determine future construction operations, equipment and building materials. Additionally, other state sources cited above do include indirect emissions from manufacture and transport of building materials. Notably, private construction contractors building private development projects are free to purchase building materials in the marketplace from a variety of sources, which are impossible for the City to predict in advance. Cement, steel, and wood products, for example, could come from any number of regions or countries, and thus could be transported to Santa Cruz from relatively short distances or much greater distances, depending on unpredictable factors such as future market prices and supply and logistical considerations. Any attempt today to predict the emissions associated with cement, steel, or lumber production and transport would therefore be purely speculative and would not lead to reliable information. Any attempted quantification might create an illusion of precision that would, in effect, deceive members of the public and decision-makers as well. The same considerations apply to the transport and use of other kinds of building materials.

Another factor to consider is that, during the 15-year build-out period for the proposed project, CARB's AB 32 regulations may well regulate many of the energy producers, manufacturers, and vehicle engines that will be producing some of the "indirect emissions" of concerns to various commenters. Congress, too, may enact climate change legislation regulating out-of-state sources. (Although the Bush Administration has not been receptive to climate change legislation, the Presidential candidates of both major parties – McCain and Obama – both advocate such legislation, suggesting that some sort of federal regulation will occur within the next year or so.) Such prospects create the danger of "double-counting" emissions, with the result that lead agencies may be asking development projects to mitigate impacts from sources that are already themselves regulated and subject to mitigation requirements. By the time the proposed project would be fully built out in 2023 or so, California should already have achieved the reductions required by AB 32. Many of these reductions will likely come from the power plants that will supply the project site and the vehicle engines that allow people to travel to and from the project site.

---

[7] Ibid.

[8] Kassie Siegel, Matt Vespa, Brian Nowicki. September 2007. "The California Environmental Quality Act – On the Front Lines of California's Fight Against Global Warming." A Center for Biological Diversity Report.

While a project's GHG emissions can be estimated with some level of accuracy, there is no currently adopted State or local threshold of significance. Although this fact, by itself, does not excuse the City from assessing whether a project's GHG emissions will be significant, the lack of consensus does indicate the difficulty associated with formulating a quantitative threshold. This state of affairs may change in the future, however. As discussed above, the Resources Agency, through SB 97, will be issuing guidance for CEQA analyses by January 2010, and CARB will be developing on a parallel track a series of programs, measures or regulations to reduce GHG emissions to the specified 1990 levels, which could affect standards and thresholds to be developed by local communities. On a local level, draft goals for the City of Santa Cruz include a 30% reduction of 1990 emission levels.

In the absence of emissions thresholds, and adopted strategies, there is no reliable gauge by which to measure the significance of project-specific quantification of GHG emissions. The City has therefore opted to employ a qualitative approach to assessing the incremental effects of the proposed project on global climate change. Such qualitative analysis is common under CEQA, as not all categories of environmental impacts easily lend themselves to quantification, as is evident from the kinds of inquiries set forth in the Initial Study Checklist form found in Appendix G to the CEQA Guidelines. Examples of impact categories for which qualitative analysis is common are aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, public services, and recreation.

One comment questioned a citation in the DEIR regarding project impacts versus cumulative contributions. The referenced citation was from the Association of Environmental Professions (June 2007) in which it was stated that "a typical individual project does not generate enough greenhouse gas emissions to influence global climate change significantly on its own; the issue of global climate change is by definition a cumulative environmental impact."[9] This conclusion is supported by the facts (i) that the problem is global in character and results from literally millions of separate sources of GHG emissions, (ii) that emissions from any one source cannot by themselves lead to measurable changes in the atmosphere or ascertainable climate change impacts, and (iii) that the major sources of GHG emissions in California are the transportation sector (41 percent), followed by electrical generation (22 percent).[10] To date, CEQA analyses of projects' contributions to global climate change have focused on such projects' incremental contributions to global cumulative effects. The DEIR recognizes the seriousness of global climate change as an existing condition, and concludes that on a global level, this is a significant cumulative impact. The fact that the cumulative effect of *all* projects is significant does not mean, however, that the contribution of *each* GHG emission source is also significant (i.e., "cumulatively considerable") in and of itself. As noted by the Court of Appeal in *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 120, a lead agency should generally undertake a two-step analysis when considering cumulative impacts. The first question is whether the *combined* effects from *both* the proposed project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the

[9] Association of Environmental Professions. June 29, 2007. "Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents."

[10] Ibid.

second question is whether "the proposed project's *incremental* effects are cumulatively considerable." (Emphasis added).) Here, the City recognizes, as it must, that the answer to the first question is "yes." This does not mean, though, that the answer to the second question must also be in the affirmative. For the 2120 Delaware Mixed Use project, the City has answered the question in the negative, in large part because the proposed project contains numerous attributes that tend to minimize its GHG emissions, including its infill location, its proximity to public transit facilities, and its mixture of land uses that should allow at least some future residents to also work on site.

One comment cites The Center for Biological Diversity[11] conclusion that "*any* new emissions generated by a project should be considered cumulatively significant." (Emphasis added.) The City is not persuaded that this is the proper threshold to apply. As was also stated by the court in *Communities for a Better Environment*, "the 'one [additional] molecule rule' is not the law." (103 Cal.App.4th at p. 120.) Furthermore, this recommended approach, by which virtually any project, no matter how small, would create a "cumulatively considerable" impact, has not been adopted on a State or local level, in which targets and goals are based on emission reductions to a certain targeted level. In short, there is no widespread agreement that any emissions increase by an individual project must be treated as cumulatively considerable as a matter of law. The position advanced by the Center for Biological Diversity has the virtue of embodying that organization's laudable objective of persuading others to reduce GHG emissions; but that position is not practical from the standpoint of a local government agency.

The CAPCOA report reviews several approaches to development thresholds including: no thresholds; a GHG threshold of zero; and approaches to developing a non-zero threshold. As noted in the CAPCOA report, AB 32 and Order S-3-05 target the reduction of statewide emissions and do not specify that emissions reductions should be achieved through uniform reduction by geographic location or by emission source characteristics. Thus, one approach would be to develop reduction percentages to be consistent with the State goal. As indicated above, however, determination of emissions reductions for new development projects would require knowledge of the efficacy of other GHG promulgated regulations and measures, and since the CARB strategies will not be available for several more years, it is difficult to determine accurately what the new project reductions might be in the short term (CAPCOA, January 2008).

Most GHG emissions in California are attributable to transportation and energy consumption over which the City has no control. Some applicable strategies that are being considered by the State are summarized in Table 5-2 (page 5-15) of the Draft EIR. State programs have not yet been formulated or put in place which could affect offsets by development, although most preliminary State-identified actions recommended by the CARB are related to fuel and energy consumption. However, it is also advocated that development projects incorporate measures to reduce vehicle miles traveled, which would also address transportation-related emissions.[12] A number of publications have

[11] Ibid.

[12] Reid Ewing, Keith Bartholomew, Steve Winkelman, Jerry Walters, Don Chen. 2008. *Growing Cooler – The Evidence on Urban Development and Climate Change.* Published by The Urban Land Institute.

identified project-level mitigation measures that could be applied to specific development projects.[13] Generally these include measures such as:

- ❑ Infill, mixed-use development
- ❑ Energy-efficient building design and heating/cooling systems
- ❑ Incorporation of transit facilities
- ❑ Implementation of vehicle-reduction measures
- ❑ Use of energy- and water-efficient appliances and equipment

One other approach would be to consider the City's draft goal of a 30% reduction and apply it to the proposed project, although reduction percentages and measures may not be uniformly applied to all reduction strategies. To the extent, moreover, that the application of such a reduction goal might find that a project causes a significant impact unless it *improves* current environmental conditions (as opposed to not making them worse), such a conclusion would be even more impractical than a "one molecule" threshold, and would be inconsistent with the legal principle that that the existing environmental setting (as opposed to a 1990 setting) is normally the baseline for assessing the significance of project impacts. (See CEQA Guidelines, § 15125(a).) In other words, CEQA analysis almost always concludes that the absence of any adverse change in existing conditions precludes the finding of a significant impact. The notion that a project would have to *improve* the status quo to avoid a "significant effect" finding under CEQA is at odds with precedents and principles developed during more than 35 years of CEQA case law and rule-making.

Importantly, the proposed project is located and designed in a manner intended to reduce vehicle miles traveled, air pollution, and energy consumption, and thus to substantially reduce GHG emissions. More specifically, the proposed project already incorporates many of the "smart growth" concepts that are advocated for project-level mitigation in many leading articles and treatises. The project is an infill development with mixed residential and non-residential uses. The site is located along a transit corridor and is accessible to transit facilities as well as to potential future rail facilities adjacent to the site. The project is planned to be developed in accordance with LEED ratings. Thus, the project incorporates many of the measures that are recommended as mitigation for development project GHG emissions. Based on reduction percentages estimated by CAPCOA, the incorporation of these measures could result in a 20-30+% reduction in GHG emissions. These reductions are based on provision of bicycle and pedestrian facilities, proximity to bicycle lanes and pedestrian network, proximity to transit, minimization of parking, mixed use development with residential and employment uses, and infill development. Additional reductions would occur with buildings designed in accordance with LEED ratings to further reduce indirect energy use and other emissions. The reductions would approach or achieve the draft City goal of a 30% reduction in emissions. In short, one would be hard-pressed to find a proposed project more suited

[13] CAPCOA, January 2008, "CEQA & Climate Change." Jones & Stokes, August 2007, "Addressing Climate Change in NEPA and CEQA Documents." Kassie Siegel, Matt Vespa, Brian Nowicki. September 2007. "The California Environmental Quality Act – On the Front Lines of California's Fight Against Global Warming." A Center for Biological Diversity Report.

to minimize its GHG emissions. Until the State of California or the Federal Government take steps requiring utilities to supply the project site with clean electricity and requiring vehicle manufacturers to ensure that the vehicles (including transit vehicles) are powered with clean energy sources, neither the project proponent nor the City of Santa Cruz can eliminate most of the GHG sources associated with the project.

Since the project implements many of the mitigations measures recommended for specific development projects, the City has concluded that the project's incremental contribution to a significant cumulative impact related to GHG emissions and global climate change is not cumulatively considerable. Neither the State nor the City has developed a threshold of significance or determined that development projects should result in a zero net increase in GHG emissions. Until such time that emission inventories and reduction strategies are fully developed, it can be reasonably argued that projects that include currently recommended measures for land use, transportation and building design have substantially mitigated their contribution to climate change and should be rewarded, rather than penalized, for their environmentally friendly design aspects.

Several comments recommended better building orientation and design to accommodate solar roof panels and landscaping. While these measures could also help reduce project-related GHG emissions, they are not required under CEQA given the other measures incorporated into the project as discussed above. A project need not include every recommendation proposed by a commenter, particularly where mitigation proposed as part of a draft EIR is already sufficient to reduce impacts to less than significant levels. Given the incorporation of other measures cited above, the DEIR properly concludes that the project's incremental effect to global climate change impacts is not cumulatively considerable. As a result, additional measures would not be required.

ALT-1 – Alternatives Analysis (7-1, 7-4, 10-50 though 10-53, 16-2, 19-1, 21-20, 21-21)

A number of comments were received in which it was stated that the DEIR did not include a reasonable range of alternatives or address alternative projects that are significantly different than the proposed project. As indicated on pages 5-31 and 5-32, the State CEQA Guidelines requires an EIR to describe and evaluate the comparative merits of a range of reasonable alternatives to the project which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen significant impacts. (See CEQA Guidelines, § 15126.6(a).) The law also provides that "CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Each case must be evaluated on its own facts, which in turn must be reviewed in light of the statutory purpose." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 566.) Moreover, "[t]he range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." (CEQA Guidelines, § 15126.6(f).) Finally, "[n]o ironclad rules can be imposed regarding the level of detail required in the consideration of alternatives. EIR requirements must be 'sufficiently flexible to encompass vastly different projects with varying levels of specificity.'" (*Al Larson Boat Shop, Inc. v. Board of Harbor Commissioners* (1993) 18 Cal.App.4th 729, 745–746.) Based on these general principles, the City concludes that an EIR for a mixed-use, infill project may give rise to fewer alternatives than might be necessary with respect to a proposal at odds with governing planning principles.

The DEIR summarizes the project impacts on pages 5-32 to 5-33 of the DEIR and outlines the project objectives on page 5-34. Three alternatives are evaluated in the DEIR:

1) Reduced Density with Modified Site Plan
2) Industrial Development with No Housing
3) Buildout under Existing Zoning Requirements with No Planned Development

These alternatives were selected as they represent a reduction in density and building square footage, as well as a change in the mix of uses that could potentially avoid or substantially reduce significant impacts, while attaining most project objectives. The State CEQA Guidelines provide that "[a]n 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 decisionmaking and public participation. An EIR is not required to consider alternatives which are infeasible." (CEQA Guidelines, § 15126.6(a).)

Here, the range of alternatives selected by the City is reasonable given the proposed uses, identified significant impacts and project objectives. Alternative 1 reduces industrial / commercial development and substantially reduces residential development potential. Alternative 2 eliminates residential and retail uses in favor of more traditional industrial-only type uses. Given the numerous Planned Development requests (see page 3-15), Alternative 3 analyzes a project that could be developed within the parameters of existing zoning requirements without a Planned Development request. A comparison of project features and key impacts (traffic, parking and water demand) is presented in Table 5-15 in the DEIR. All alternatives would result in a reduction of density or land use intensity, ranging between a 7 and 20 percent reduction in industrial/commercial uses and a 30-100% reduction in residential uses. In particular, Alternative 3 would result in an approximate 20% reduction in industrial/commercial uses and an approximate 30% reduction in residential uses.

A project alternative that is substantially different than the project as suggested in one comment would not meet most project objectives and was not considered. An alternative site was not considered, as there are no other vacant, industrially-designated sites within the City that are 20 acres in size as is the project site. Nor was it likely that a different site would have the environmental advantages associated with the proposed site, which is at an infill location close to transit services. One comment suggested an alternative that includes a significant dedication of park and recreation space that would reduce the level of onsite development and would eliminate the significant and unavoidable impact on water supply. Such an alternative was unnecessary, however, as the DEIR analysis did not identify a significant parks impact that would warrant park dedication.

Two comments suggested alternatives to eliminate the significant unavoidable water supply impact. As indicated in Master Response WS-1: Water Supply, the water supply impact is related to timing of development, not the amount of project water demand, which could be provided if the project were constructed within the next few years. There is no alternative available to eliminate significant unavoidable water supply demands except for a project that is constructed within a shorter timeframe, and the City does not have the ability to impose such a requirement, given that the pace of build-out is a function of market conditions, which are beyond the control of the City (and indeed beyond the control of the applicant). It should be noted that the project as currently

proposed does not propose a discrete development phasing plan in which a specific level of development is linked to a specified timeframe. Notably, Mitigation Measure 4.6-3a provides for a kind of phasing, should it be necessary, insofar as individual permits in the future could be held up should they be sought at a time when the City's water supply situation has reached the point where additional hook-ups would (i) substantially exacerbate the City's efforts to conserve water during drought conditions or (ii) preclude or make substantially more difficult the City's ability to provide reliable water service for existing customers and for properties within the City's water service area that, despite having received all necessary discretionary local entitlements to develop, have not yet developed to the point where they will require water service from the City.

Table 5-16 provides a comparison of project impacts. Significant impacts related to parking and encroachment into the riparian setback area are avoided in all project alternatives. The level of traffic trip generation and water demand also would be substantially reduced in Alternatives 2 and 3, although intersection improvements would continue to be warranted. As shown on Table 5-15 and discussed in the DEIR text all alternatives reduce vehicle trips traveled and associated emissions. The severity of most other significant impacts (except for geology and soils) would be reduced, although significant impacts would remain, but would be reduced to a less-than-significant level with mitigation.

One comment questions how Alternative 2 would meet at least five Project Objectives given the uses described on page 5-42 of the Draft EIR. The uses listed on page 5-42 are examples of what uses might be included in the alternative, but are not all inclusive. Generally, the alternative eliminates residential and retail uses, but a mix of industrial and commercial uses would be maintained. Thus, the five listed objectives related to business development and green building would continue to be met under this alternative.

One comment questions how Alternative 3 would meet at least six Project Objectives given the uses described on page 5-47 and 5-48 of the Draft EIR. The DEIR indicates that six Project Objectives will be met, which do not include objectives related to retail uses that would be eliminated under this alternative or to residential uses that would be reduced under this alternative. However, the six project objectives that would be met relate to business development and building design which would be met under this alternative. The DEIR indicates that four Project Objectives will be partially met, including a mix of uses (as retail uses would be excluded) and helping to meet housing needs created by the project, as some housing would be developed under this alternative. Finally, the DEIR indicates that two Project Objectives would not be met under this alternative, including objectives related to created adaptable live-work areas and a mixed-use neighborhood with retail uses as these uses would be eliminated under this alternative. Thus, the discussion has appropriately identified how project objectives would or would not be met under this alternative.

One comment notes that the DEIR indicates that Alternatives 2 and 3 would not meet project objectives to reduce traffic, air pollution, and greenhouse gas emissions. This objective, however, refers to promoting a mixed-use neighborhood development that includes retail uses with a compact design to reduce vehicle usage and thus traffic and emissions. Alternative 2 eliminates residential and retail uses, and Alternative 3 eliminates retail uses and reduces residential uses. Because of this change in land use

mix, the DEIR concludes that the project objective to promote mixed-use neighborhood development is not met with these two alternatives.

Based on the review in the DEIR as supplemented with the above information, Alternative 3 was determined to be the environmentally superior alternative, as it best met project objectives, while also substantially reducing or avoiding significant impacts compared to the other two alternatives analyzed. While Alternative 1 would reduce impacts as compared to the proposed project, Alternative 3 was determined to result in the least impacts, while best meeting project objectives, and would require least amount of parking. As such, Alternative 3 was considered to be the environmentally superior alternative.

1.4 Response to Comments

Comments received on the Draft EIR and the individual responses to those comments are provided in this section. Each comment letter is reproduced in its entirety and is followed by responses to the substantive comments raised on environmental issues discussed in the Draft EIR.

State Agencies

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

May 1, 2008

Sandy Brown
City of Santa Cruz
809 Center Street, Room 107
Santa Cruz, CA 95060

Subject: 2120 Delaware Mixed Use Project
SCH#: 2007012097

Dear Sandy Brown:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on April 30, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2007012097
Project Title 2120 Delaware Mixed Use Project
Lead Agency Santa Cruz, City of

Type EIR Draft EIR

Description The project consists of a Vesting Tentative Subdivision Map for a 45-lot subdivision (plus 11 common area lots) and other permits to accommodate a mixed-use industrial-residential project. The 45 proposed lots would be divided into residential and business condominium units. The ground floor would consist entirely of industrial and/or commercial development. Residential development would be located on the upper floors. Residential uses include 84 flats, 77 work/live townhouse units, and 87 "flex" spaces could be used as residential units or industrial/commercial space. Thus, project development would range from 395,382 square feet of industrial/commercial development with 161 residential units to 338,502 square feet of industrial/commercial development with 248 residential units.

Lead Agency Contact

Name Sandy Brown
Agency City of Santa Cruz
Phone (831) 588-8204 **Fax**
email
Address 809 Center Street, Room 107
City Santa Cruz **State** CA **Zip** 95060

Project Location

County Santa Cruz
City Santa Cruz
Region
Cross Streets Delaware and Swift
Parcel No. 003-121-01, 003-081-01, 003-032-01
Township **Range** **Section** **Base**

Proximity to:

Highways 1, 9, 17
Airports
Railways Union Pacific
Waterways Arroyo Seco Creek, Monterey Bay
Schools Pacific Collegiate
Land Use Industrial / Industrial with Coastal Zone Overlay on southern portion of the site

Project Issues Aesthetic/Visual; Air Quality; Coastal Zone; Cumulative Effects; Drainage/Absorption; Geologic/Seismic; Growth Inducing; Landuse; Public Services; Recreation/Parks; Schools/Universities; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 3; Department of Parks and Recreation; Native American Heritage Commission; Public Utilities Commission; Office of Emergency Services; Department of Fish and Game, Region 3; Department of Water Resources; Department of Conservation; California Coastal Commission; California Highway Patrol; Caltrans, District 5; Department of Toxic Substances Control

Date Received 03/17/2008 **Start of Review** 03/17/2008 **End of Review** 04/30/2008

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

Response to Comment Letter # 0
California Governor's Office of Planning and Research
May 1, 2008

0-1 Compliance with State Clearinghouse Review

Comment is noted. No further action is required.

ARNOLD SCHWARZENEGGER, Governor

STATE OF CALIFORNIA – THE RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
(831) 427-4863

April 30, 2008

Sandy Brown
City of Santa Cruz Planning and Community Development Department
809 Center Street, Room 107
Santa Cruz, CA 95060

Subject: ***Draft Environmental Impact Report (DEIR) for Proposed Mixed-Use Project at 2120 Delaware Avenue (SCH 2007012097)***

Dear Ms. Brown:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the proposed mixed-use project at 2120 Delaware Avenue. We have the following comments regarding the proposed project:

Coastal Zone Appeal Jurisdiction: If any portion of a proposed development approved by a local coastal development permit (CDP) is located in an appealable zone (as identified in certified Zoning Ordinance section 24.04.186), then the entire CDP action must be identified as appealable. Regarding this project, a portion of the proposed project is located within 100 feet of reach #3 of Arroyo Seco Creek. Thus, the proposed project is appealable pursuant to Zoning Ordinance Section 24.04.186(2)(a)(3). Therefore, the *entire* project must be noticed as appealable. However, if an appeal of the City's approval of the project is received by the Commission, the issues raised in the appeal can *only* pertain to the project components that are located in the appeal zone, in this case the project components located within 100 feet of reach #3 of Arroyo Seco Creek. If the Commission finds that the appeal contentions raise a Substantial Issue with respect to the project's consistency with the certified Local Coastal Program, the Commission would then take jurisdiction over the coastal permit for the *entire* portion of the project that is located within the coastal zone. Then, on de novo review, the *entire* portion of the project that is located within the coastal zone, including the portion of the project located *outside* of the appealable zone, will be subject to Commission review and approval.

Arroyo Seco Creek: Page 4-106 notes that the required setbacks for Arroyo Seco Creek reach #3 in the *Citywide Creeks and Wetlands Management Plan* were modified by the Commission. However, please note that these modifications require a 30-foot-wide riparian corridor and a 50-foot-wide development setback (the DEIR states that the Commission required an 80-foot-wide development setback) for a total riparian corridor/development setback width of 80 feet along this creek reach.

As proposed, the project would allow encroachments into the development setback area (parking and a portion of a building). We are highly supportive of Mitigation 4.8-1a, which modifies the project to require that parking and building areas to be located outside of the development setback area.

The proposed project includes development of a trail constructed of decomposed granite in the development setback area adjacent to Arroyo Seco Creek and extending from Delaware Avenue to the railroad right-of-way to the north. The DEIR states: "The trail is proposed as a

private trail to be managed by the Master Ownership Association and made available for [the] general public subject to restrictions for maintenance and safety." What mechanism will be used to ensure that the trail remains open to the public (deed restriction, easement, e.g.)? Also, please describe the proposed restrictions on public use of the trail. We recommend that the trail be clearly signed and made available for public use. We further recommend that the trail be sited and designed to blend in with the aesthetic of the creek (including through use of a curvilinear layout), that the trail accommodate creek interpretation (including benches and interpretive signs regarding creek habitats and details regarding the relocation and restoration of this reach of creek), and that the property owner be responsible for maintenance of the trail and its components over time.

Hydrology and Water Quality: The preliminary project drainage plan proposes that site drainage be collected, detained, and conveyed via two closed conduit underground storm-sewer detention systems, i.e. underground pipelines, which would convey storm water to Arroyo Seco Creek. The proposed project includes a substantial increase in impervious surface area, which could substantially increase the local runoff rate and volume. The runoff could carry with it pollutants such as heavy metals, petroleum products, suspended solids, nutrients, and synthetic organic chemicals. Although, the proposed project includes a Vortex separator unit located underground before each outfall, these units require regular maintenance to ensure that they continue to function in removing suspended sediments and attached pollutants from runoff. The current trend in hydrology and water quality is Low Impact Development (LID), which is a new, comprehensive land planning and engineering design approach with the goal of maintaining and enhancing the pre-development hydrologic regime of urban and developing watersheds. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Techniques are based on the premise that storm water management should not be seen as storm water disposal. Instead of conveying and managing/treating storm water in large, costly end-of-pipe facilities located at the bottom of drainage areas, LID addresses storm water through small, cost-effective landscape features located at the lot level. Given that one of the project objectives is to create a smart growth certified Leadership in Energy and Environmental Design neighborhood development, the project should include LID management measures including:

- Preserving and enhancing the project site's natural drainages, as shown in Figure 4.4-2;
- Providing for onsite storm water infiltration and filtration through the use of vegetated detention basins/swales located throughout the project site, including near outfalls (instead of the use of underground water quality units);
- Limiting increases of impervious areas through the use of pervious concrete or asphalt materials in the project's driveways and parking areas.

In addition, for any pollutant generation areas (such as vehicular parking areas, maintenance/wash down areas, trash/recycling areas, etc.) specialized best management practices should be applied to protect water quality. These include engineered systems for vehicular areas, drains to the sanitary sewer for maintenance and trash areas, etc.

Global Warming/Green Technology: The City of Santa Cruz has long been an advocate for environmental conservation and sustainable living. The 2006 Santa Cruz Climate Action

Declaration established the City's commitment to reduce greenhouse gas emissions and respond to global climate change. The City's primary Greenhouse Gas (GHG) reduction goal is to reduce community-wide greenhouse gas emissions 30 percent by 2020 and 80 percent by 2050 (compared to 1990 levels). City-initiated actions alone will not meet these community-wide reduction goals. Successful Greenhouse Gas Reduction strategies must include participation from the residences and businesses of Santa Cruz. Given that the project constitutes one of the largest single developments ever proposed in the City of Santa Cruz, the project should include development components that will help the City reach its goal of reducing community-wide greenhouse gases.

The project includes a large amount of rooftop space. The rooftops of the proposed buildings could be developed with a combination of solar panels and green plantings. The solar panels would provide electrical energy to the project that does not produce greenhouse gases. Some portions of the rooftops could also be planted with grasses or other sustainable plantings that would reduce storm water runoff and help to provide a more consistent temperature inside the buildings, which would lead to less energy use within the developed project. If the planted rooftop areas were accessible, these areas could also provide an element of additional "natural" open space for the residents and tenants.

Circulation: The DEIR notes that the project site is bordered by the railroad line and right-of-way on the north and that the Santa Cruz Regional Transportation Commission has signed a letter of intent in December 2004 to purchase the rail right-of-way for future transportation purposes, including a bicycle and pedestrian path along the right-of-way. The DEIR also notes that the 2005 Regional Transportation Plan supports reserving areas adjacent to rail lines for future rail and bus facilities as part of new development adjacent to rail lines. The project description should include options for providing a passenger rail stop adjacent to the project development should passenger rail service on this rail line become a reality in the future.

The project site is located on Delaware Avenue, which provides public access (including parking) to nearby Natural Bridges State Park, as well as other coastal areas located in the west side of Santa Cruz. As proposed, the project has a deficit of 305 parking spaces. This deficit would likely cause a substantial number of project residents and tenants to park along Delaware Avenue, which would have a negative impact on existing public coastal access parking on Delaware Avenue. We therefore are very supportive of Mitigation 4.5-5a, which requires a revised site plan for the entire project site that provides sufficient onsite parking using the worst case parking requirements as defined in the DEIR. In terms of ensuring that all site parking needs are met onsite, we recommend that all possible efforts be made to limit the need for parking, including aggressive transportation demand management incentives for non-vehicular travel, etc. For the remaining parking demand that still needs to be accommodated, we recommend that site design avoid large expanses devoted to parking. For example, to achieve adequate parking supply without using a large percentage of the project site for parking, the applicant may wish to consider the use of stackable parking (local projects that have used stackable parking include the Ocean Harbor House condominiums on Surf Way in the City of Monterey and the new Intercontinental Hotel on Cannery Row in Monterey). Another option to ensure that all project parking is included onsite and to reduce the amount of project surface area devoted to parking would be the installation of underground parking garages.

Water Supply: The DEIR acknowledges that the proposed project would result in a water demand that may prevent the City from being able to serve the project after 2015, given other planned growth and the City's limited water supply. The DEIR also notes that there is great uncertainty related to the future approval, construction, and operation of a permanent desalination plant to provide additional water supply to the City. This water supply has been identified as addressing drought conditions, and not for fostering new growth. For these reasons, the water supply impacts associated with the proposed project are considered significant and unavoidable. The proposed mitigations include adding a condition to the project approval requiring the City to consider, with each subsequent application for a design or building permit, whether the incremental development will substantially exacerbate the City's efforts to conserve water during drought conditions or preclude or make substantially more difficult the City's ability to provide water to serve existing customers and other approved development. Given the uncertainty regarding the City's future water supply, we recommend that the City only approve and authorize the amount of development that can be demonstrated to be served adequately by public services, including water. To approve additional development based on an uncertain water supply does not make planning or public policy sense, and could lead to unforeseen resource impacts as future components of the project come online and demand for water intensifies at the site, including with respect to the degree an overall approval now could be perceived or argued to represent some type of entitlement to water.

[Also, please note that in paragraph four of page 4-74 the units regarding projections of water demand should be changed from MGD (million gallons per day) to MGY (million gallons per year).]

Thank you for the opportunity to comment on this in the development stage of this project. As you move forward with your project analysis and environmental review, the issues identified above, as well as any other relevant coastal issues identified upon further review or due to project modifications, should be considered in light of the provisions of the certified City of Santa Cruz LCP. In any event, we may have more comments for you on this project after we have seen additional project information, revisions, and/or the FEIR. If you have any questions, please do not hesitate to call me at (831) 427-4863.

Sincerely,

Susan Craig

Susan Craig
Coastal Planner
Central Coast District Office

c: State Clearinghouse

Response to Comment Letter # 1
California Coastal Commission
April 30, 2008

1-1 General Statement - Jurisdictional

Comment regarding Coastal Zone Appeal Jurisdiction is noted and referred to City staff and decision makers for further consideration.

1-2 Biological Resources - Arroyo Seco Creek Setbacks

Comment regarding the riparian and setback widths are noted; and the text on page 4-106 has been revised.

1-3 Biological Resources – 4.8-1a Mitigation Measure Support

Comment is noted. The City staff appreciates the CA Coastal Commission's support for mitigation measure 4.8-1a.

1-4 Biological Resources – Arroyo Seco Creek

The proposed project includes development of a trail adjacent to Arroyo Seco Creek. The DEIR states: "The trail is proposed as a private trail to be managed by the Master Ownership Association and made available to the general public subject to restrictions for maintenance and safety." The comment asks what mechanism will be used to ensure that the trail remains open to the public (deed restriction, easement, e.g.), and requests a description of the proposed restrictions on public use of the trail.

The trail is proposed to be in the form of a grant of easement to the city for a trail for public access. The restrictions imposed on the public use of the trail require that the trail be used for pedestrian and non-motorized bicycle access only during daylight hours. At the terminus of the trail to the north near the railroad tracks a sign would be located to mark the end of the public trail. The terminus would be defined by a bollard or see-through fencing until such time as the railroad right-of-way (ROW) is extended and improved for public access. The connection to the railroad ROW would be completed by the Project Owner's when (and/or if) the railroad ROW is modified to a rail-trail facility within the time period of the Development Agreement.

1-5 Biological Resources – Arroyo Seco Creek

The comment recommends that the trail be clearly signed and made available for public use; be sited and designed to blend in with the aesthetic of the creek; that the property owner be responsible for maintenance of the trail and its components over time.

The trail located adjacent to Arroyo Seco Creek would include appropriate signage and be made available for public use. The trail is proposed at five feet in width and made of decomposed granite. The trail has been sited so as to compliment the riparian corridor. Toward that end, it would gently curve and follow the direction of the corridor. The owner would install and pay for all improvements for the trail and adjacent landscaping. A minimum of four signs would be posted at conspicuous locations informing the public that the trail is open to public use during daylight hours, and of any coastal access trail connections. Interpretive signage has also been proposed along the trail which would

describe creek habitats. Benches are proposed at six locations along the pathway. The trail, signs, benches, and landscaping including the design, materials, specific location, and planting types would be subject to approval by the City. The Project CC&Rs shall include a provision for maintenance of the trail.

1-6 Hydrology and Water Quality – Low Impact Development

See Response to Comment 2b-3.

1-7 Hydrology and Water Quality – Best Management Practices

As described in the Draft EIR (see page 4-42), the project applicant will be required to comply with the City's Storm Water Management Program (SWMP). City Ordinance 16.19.140 requires that any construction project implement best management practices which includes engineered systems for vehicular areas, drainages to the sanitary sewer for maintenance and trash areas.

1-8 Cumulative Impacts – Global Climate Change

Please see Master Response CUM-1.

1-9 Traffic and Transportation – Railroad Right-of-Way

While the 2005 Regional Transportation Plan does call for reserving right-of-way for future rail facilities, there are no specific plans that address the location or design of such facilities in the vicinity of the project site. The only site specific planning to date has been for a recreational rail train (the "Village Cruzer") located between Aptos and Capitola. The report, entitled *Passenger Platforms and Related Improvements to the Santa Cruz Branch Line for Recreational Rail Service* (SCCRTC, 2003) looked at the feasibility of constructing five rail stops and identified a typical passenger platform that is 10 feet wide by 150 feet long. This space requirement is within the existing rail corridor right-of-way. While not definitive for what future rail stops may need, if constructed, in Santa Cruz, this typical platform design provides an initial indication of what could be constructed adjacent to the project site in the future.

Furthermore, as described in the project description, the project applicant proposes to construct a trail along the west side of the project (see Response to Comment 1-4 above). As noted on page 4-69 of the DEIR, a recommended condition of approval would require the project applicant to include an offer to dedicate an easement to the SCCRTC allowing bicycle/pedestrian access from the project site to the railway right-of-way.

1-10 Traffic and Transportation - Parking

Comment regarding strategies to address the project's parking deficiency is noted and referred to City staff and decision makers for further consideration.

1-11 Water Supply

Please see Master Response WS-1.

1-12 Water Supply – Correction

The identified correction is appreciated. The Final EIR text has been clarified to show MGY (million gallons per year), as opposed to MGD (million gallons per day).

Linda S. Adams
Agency Secretary

California Regional Water Quality Control Board

Central Coast Region

Arnold Schwarzenegger
Governor

Internet Address: http://www.waterboards.ca.gov/centralcoast
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906
Phone (805) 549-3147 • FAX (805) 543-0397

April 29, 2008

Ms. Sandy Brown
City of Santa Cruz Planning and Community Development Dpt.
809 Center St., Rm 206
Santa Cruz, CA 95060

Redtree Properties LP
Craig French, Managing Director
P.O. Box 1041
Santa Cruz, CA 95061

Ms. Brown and Mr. French:

SITE CLEANUP PROGRAM: 2120 DELAWARE MIXED USE PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT, SCH# 2007012097, SANTA CRUZ, MONTEREY COUNTY

Central Coast Regional Water Quality Control Board (Water Board) staff have reviewed the Draft Environmental Impact Report (DEIR) for the above-referenced project (Delaware site), and have comments regarding the plans to intercept and lower groundwater elevation at the site. According to the DEIR, and expanded upon in Bowman & Williams Consulting Civil Engineers May 21, 2007 "Response to Sub Drainage Inquiries & Liquifaction" letter, we understand that the site owners intend to install a french drain on the northern end of the site to intercept groundwater. Groundwater flows generally northwest to southeast under the site. The french drain would intercept groundwater as deeply as possible as it enters the site, and discharge the water to the adjacent Arroyo Seco Creek. The intention of this system is to "sufficiently lower groundwater levels across the site, thereby alleviating the potential for liquefaction as well as providing more favorable conditions for grading operations." Additional curtain drains may be added to other areas of the site.

We have two concerns with the french drain system. Santa Cruz Industries, located on the southeastern corner of the subject property (411 Swift Street), is an active Site Cleanup Program case. Tetrachlorotheylene (PCE) and other contaminant concentrations in soil and groundwater exceed California Human Health Screening Levels for these solvents. Based on 16 years of subsurface investigation data, chlorinated solvents are present as both as Dense Non-Aqueous Phase Liquid, and dissolved-phase in the groundwater. The site owners are actively investigating and remediating the PCE contamination. As shown on Attachment 1, the PCE plume extends from the Santa Cruz Industries site, and has flowed along the groundwater

gradient direction away from the Delaware site. However, if the Delaware site owners initiate actions to pull groundwater elevations down and toward the northern end of their site, this action may very well pull the PCE plume toward and beneath the Delaware site property. Continual dewatering action may also result in PCE contaminated water being discharged, via the Delaware site's drains, into the adjacent Arroyo Seco Creek. If PCE were discharged due to the dewatering, there is a possibility that the Delaware site owners may be liable for PCE cleanup. Because dewatering may affect the PCE plume and pull it toward the Delaware site, we advise that the Delaware site owners reconsider the plans for dewatering. If the Delaware site owners do proceed with a dewatering system, Water Board staff suggests, at a minimum, the owners perform aquifer evaluation (i.e. pump test) or enter into an agreement with Elkof, Inc. (Swift Industries) to perform the tests in order to predict the effect on the PCE plume.

Separate from the PCE discharge issue is the question of dewatering in general. Any person who wishes to discharge to a creek or other waterbody may be subject to National Pollutant Discharge Elimination System (NPDES) permit requirements. If Water Board staff determines there is a chance of encountering PCE during dewatering, you may be required to treat the groundwater prior to discharge, and enroll in the Highly Treated Groundwater Order No. R3-2006-0067. If there is no possibility of PCE contamination in the discharged water, you may be required to enroll in the Low Threat Discharges Order R3-2006-0063. Please consult with Water Board staff member Mike Higgins, mhiggins@waterboards.ca.gov (805) 542-4649 regarding these dewatering permits.

If you have questions regarding this letter, or the Santa Cruz Industries' case, please contact **Donette Dunaway, ddunaway@waterboards.ca.gov (805) 549-3698** or Sheila Soderberg, ssoderberg@waterboards.ca.gov (805) 549-3592.

Sincerely,

Sheila Soderberg for/

Roger W. Briggs
Executive Officer

Attachment 1 – PCE Plume

cc:

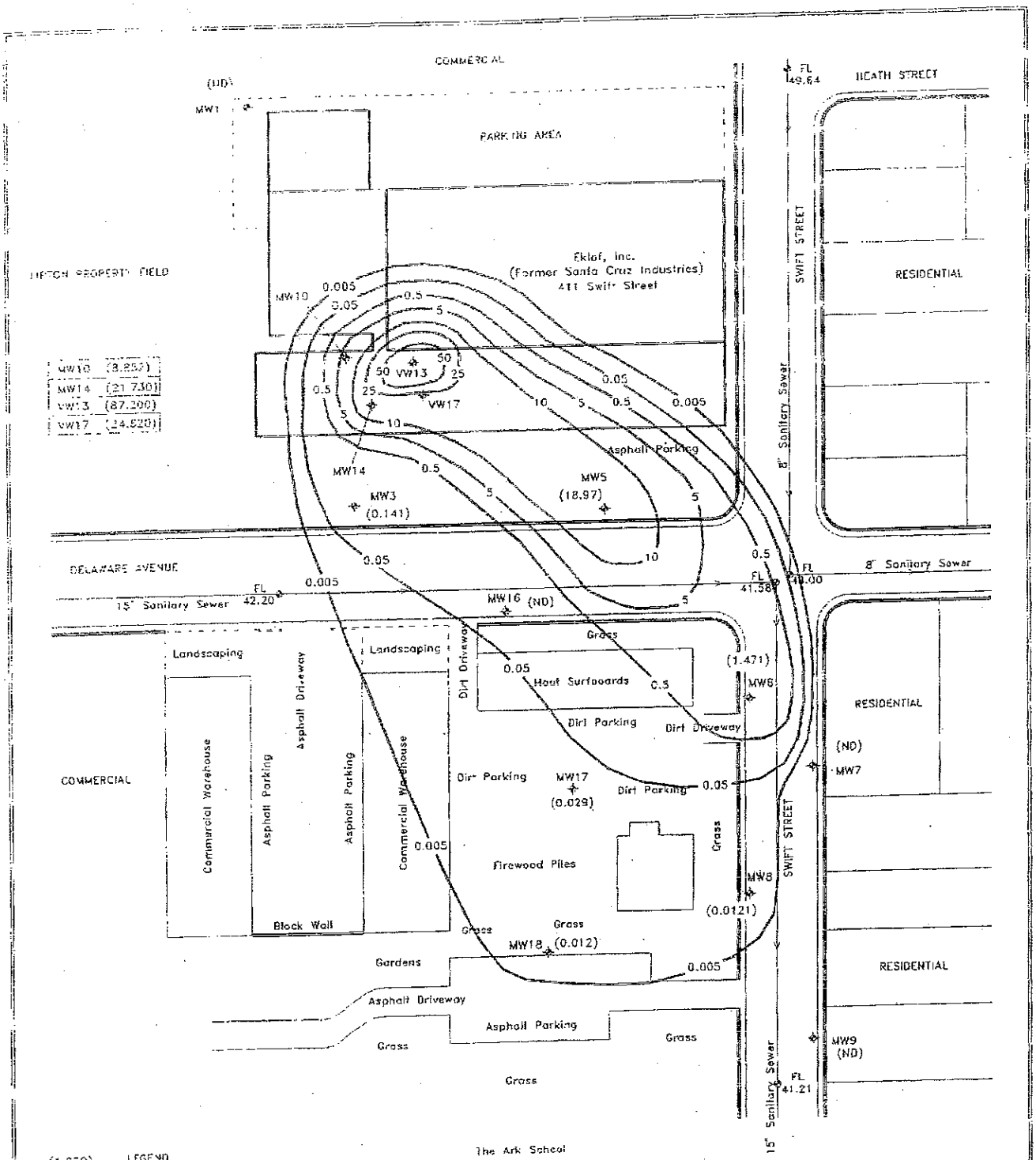
Steve Baiocchi
Sant Cruz County Environmental Health
701 Ocean St, Rm 312
Santa Cruz, CA 95060

Tom Eklof
Eklof Inc.
411 Swift Street
Santa Cruz, CA 95060

James Gill
111 John Street
Santa Cruz, CA 95060

David Houghton
A+ Environmental Solutions
6898 Soquel Ave.
Santa Cruz, CA 95062

S:\Site Cleanup Program\Regulated Sites\Santa Cruz Co\Santa Cruz\411 Swift Ave.Santa Cruz Industries\correspond 2008 -\EIR response, adjacent Delaware prop.doc



LEGEND

Groundwater Samples Collected on December 20, 2006

Basemap Source: Assessor's Parcel Maps, Book 5

FIGURE 4 – Total VOC Contours
Former Santa Cruz Industries
411 Swift Street
Santa Cruz, California

Remediation Testing and Design
P. O. Box 1356
Santa Cruz, California 95061-1356
Phone: (831) 458-1612 Fax: (831) 458-1509

Designed by: REV
Job Number: 948309
Rev. Date: Jan. 18, 2007
File Name: VOC1207.DWG
Sheet 1 of 1

Attachment 1, PCE Plume

Response to Comment Letter # 2a
California Regional Water Quality Control Board – Central Coast Region
April 29, 2008

2a-1 Hazardous Materials – PCE Plume

The comment asks how the proposed project site dewatering and installation of curtain drains might affect the PCE plume on the adjacent site, which may enter the project site and result in PCE contaminated water being discharged into Arroyo Seco Creek.

Weber, Hayes and Associates provided a review of existing data and estimated future ground elevation contour maps for dewatering conditions and proposed installation of curtain drains. Although the long-term change in groundwater flow direction is predicted to be slight, the evaluation indicates there is the potential for dewatering to cause limited groundwater flow and PCE migration from the adjacent site to the project site, under both short-term and long-term (transient and steady state) conditions. Remediation of the adjacent site is in progress, which would eliminate the contamination. Additionally, installation of a barrier at the property line would prevent groundwater migration onto the project site if remediation is not complete. The project applicant has incorporated the recommendation of the Weber, Hayes review, and thus, the project as modified would not result in the migration of contaminated groundwater onto the project site with associated potential discharge of contaminated groundwater into Arroyo Seco Creek.

The additional review is provided in Chapter 2 –Revisions to Draft EIR.

2a-2 Hazardous Materials – Permits Required

As discussed in the Draft EIR Project Description (page 3-18) and section 4.4: Hydrology and Water Quality (page 4-41 and 4-42), the proposed project anticipates the requirement of an NPDES Phase 2 Municipal Stormwater Permit due to discharge into Arroyo Seco Creek. Comment regarding discharge requirements related to collection and discharge of dewatered groundwater is noted.

California Regional Water Quality Control Board
Central Coast Region

Linda Adams
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb3
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

May 15, 2008

Ms. Sandy Brown
City of Santa Cruz
Planning and Community Development Dept.
809 Center Street, Room 107
Santa Cruz, CA 95060

Dear Ms. Brown:

2120 DELAWARE MIXED USE PROJECT, SANTA CRUZ, SCH#2007012097

Thank you for the opportunity to review the above-referenced document. The Central Coast Regional Water Quality Control Board (Water Board) is a responsible agency under the California Environmental Quality Act (CEQA). Water Board staff understands that the project proposes to develop 45 lots into residential and business condominium units, including up to 248 residential units and 395,382 square feet of industrial and commercial space.

We have the following specific comments about the project:

1. The project proposes to use Vortechnics vortex separators to treat urban runoff from the developed project site. Implementation of Vortechnics vortex separators is not adequate to mitigate the adverse impacts that can be expected to result from the project due to urban runoff pollutant discharges into Arroyo Seco Creek. Vortex separators are typically less effective at removing pollutants from urban runoff than other conventional treatment best management practices (BMPs) such as buffer strips and swales. To mitigate the adverse impacts resulting from urban runoff pollutants leaving the project site, more effective treatment BMPs must be implemented.

   The Draft Environmental Impact Report (EIR) does not adequately support the use of vortex separators as effective treatment BMPs. As evidence of the effectiveness of vortex separators, the Draft EIR cites Schueler's 1994 article "Pollutant Dynamics of Pond Muck." However, as the title of the article suggests, the article contains no support for the Draft EIR's claim that "the Vortechnics system was found to be 50 percent more effective in capturing [fine-grained] sediments than conventional BMPs." The California Stormwater Quality Association's Best Management Practice Handbook gives vortex separators a medium removal effectiveness rating for sediment, with low effectiveness ratings for nutrients and metals. This is significant, because nutrients and metals (and other pollutants) are typically identified as pollutants of concern for residential and commercial developments such as the proposed project. Both buffer strips

and swales, as well as numerous other BMPs, rate higher overall for pollutant removal effectiveness. Constructed wetlands or bioretention systems, are given much higher pollutant removal effectiveness ratings than vortex separators. Since more effective treatment BMPs are readily available, more effective treatment BMPs must be implemented for the proposed project.

2. The proposed project does not adequately control post-construction urban runoff flow rates, volumes, and durations leaving the project site. Increased rate, volume, and duration of urban runoff discharges from the project site can cause increased bank erosion and downstream sedimentation, scouring, and channel widening, which can significantly impact aquatic ecosystems and degrade water quality. The project only proposes to control the peak flow rate of the 10-year storm. Such control will only serve to extend the duration that erosive flows occur, since it does not address control of runoff volume. The approach also ignores smaller, more frequent storms which typically generate the channel-forming flows. By not addressing flows from these smaller, more frequent storms, erosive flows from the project can be expected to occur more frequently, at greater magnitude, and for longer periods. These adverse impacts must be addressed by the EIR.

Both of the above issues can be addressed by incorporating low-impact development (LID) concepts into the proposed project. LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control storm water runoff where it is generated. The objective is to disperse LID devices uniformly across a site to minimize runoff. LID serves to preserve the hydrologic and environmental functions altered by conventional storm water management. LID methods provide temporary retention areas, increase infiltration, allow for pollutant removal, and control the release of storm water into adjacent waterways (Anne Guillette, Whole Building Design Guide). For further information on LID please see:

http://www.epa.gov/owow/nps/lid/

or

http://www.lowimpactdevelopment.org/

Eight Common LID Practices Include:

1. Reduced and disconnected impervious surfaces;
2. Native vegetation preservation;
3. Bioretention;
4. Tree boxes to capture and infiltrate street runoff;
5. Vegetated swales, buffers, and strips;
6. Roof leader flows directed to planter boxes and other vegetated areas;
7. Permeable pavement; and
8. Soil amendments to increase infiltration rates.

Water Board staff considers a project that meets the following descriptions (inclusive) to be a LID project:

A. Runoff Volume Control. The pre-development stormwater runoff volume is maintained by a combination of minimizing site disturbance and providing distributed retention BMPs. Retention BMPs are structures that retain the excess (above pre-development project volumes) runoff resulting from the development for the design storm event (2-, 10-, and 25-year, 24-hour duration storm). Note that "retention" is required, as opposed to "detention"; retention may be achieved using infiltration methods, and capture-for-use methods.

B. Peak Runoff Rate Control. LID practices maintain the pre-development peak runoff discharge rate. This is done by maintaining the pre-development time of concentration and then using retention and/or detention BMPs (e.g., rain gardens, open drainage systems, etc.) that are distributed throughout the site, to control runoff rate and volume. If retention practices are not sufficient to control the peak runoff rate, detention practices may be added.

C. Flow Frequency Duration Control. Since LID emulates the pre-development hydrologic regime through both volume and peak runoff rate controls, the flow frequency and duration of post-development conditions must be identical (to the greatest extent possible) to those of pre-development conditions. Maintaining pre-development hydrologic conditions will minimize or eliminate potential impacts on downstream habitat due to erosion and sedimentation.

The City of Santa Cruz will soon be subject to the Phase II Municipal Storm Water Permit (General Permit). As part of its responsibility, the Water Board must determine permittees' compliance with General Permit requirements. This includes determining whether the City of Santa Cruz has reduced pollutant discharges to the Maximum Extent Practicable (MEP).[1] The General Permit requires permittees to prevent or minimize water quality impacts from new development and redevelopment projects.[2] As noted above, the volume and velocity of storm water discharged from new development and redevelopment projects can cause increased bank erosion and downstream sedimentation, scouring, and channel widening, which can significantly impact aquatic ecosystems and degrade water quality. Therefore, permittees must develop and implement Storm Water Management Programs (SWMP) that require new and re-development maintain pre-development hydrologic characteristics, such as flow patterns, surface retention, and recharge rates, in order to minimize post-development runoff impacts to water bodies. In most cases, MEP standards are not met by conventional site layouts, construction methods, and storm water conveyance systems

[1] "Permittees must implement Best Management Practices (BMPs) that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality." Effluent Limitations, General Permit Fact Sheet, pg. 6.

[2] "Post-Construction Storm Water Management in new Development and Redevelopment – The Permittee must: 1) Develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects...by ensuring that controls are in place that would prevent or minimize water quality impacts", General Permit, pg 11, Provision e.1.

with "end of pipe" basins, since these treatment systems do not address the changes in volume and rates of storm water runoff. Low Impact Development practices meet the MEP standard and are more effective at reducing pollutants in storm water runoff at a practicable cost.

Therefore, the City of Santa Cruz must incorporate LID methodology into the proposed project, unless it can be demonstrated that conventional BMPs are equally effective, or that conventional BMPs would result in a substantial cost savings, while still adequately protecting water quality and reducing discharge impacts. In order to justify using conventional BMPs based on cost, the City of Santa Cruz must show that the cost of low impact development would be prohibitive because the "cost would exceed any benefit to be derived" (State Water Resources Control Board Order No. WQ 2000-11). Studies by the Environmental Protection Agency have shown that LID is generally less expensive than conventional development.

We look forward to seeing and commenting on the Final Draft EIR and request we be contacted when the document is available. If you have questions, please contact **Phil Hammer at (805) 549-3882** or Matt Thompson at (805) 549-3159.

Sincerely,

for Roger W. Briggs
Executive Officer

S:\CEQA\Comment Letters\Santa Cruz County\2120 Delaware Mixed Use, Santa Cruz, Comment Ltr 7May08.doc

Response to Comment Letter # 2b
California Regional Water Quality Control Board – Central Coast Region
May 15, 2008

2b-1 Hydrology & Water Quality – Vortechnics Vortex Separators

Based on comments received by the RWQCB, the proposed water quality system was further reviewed. The comment indicates that the proposed Vortechnics system has been given a medium removal effectiveness rating for sediment with low effectiveness ratings for nutrients and metals. Nutrients and metals are typically identified as pollutants of concern for residential and commercial developments. The comment indicates there are more effective treatment BMPs available. (See also Response to Comment 2b-3 below regarding LID development on the project site).

The City is in the preliminary stages of preparing new Storm Water Management Plan (SWMP) to be compliant with the Phase II Municipal Storm Water Permit (General Permit). The SWMP will potentially increase the standard for what the City will be able to accept as the "maximum extent practical" (MEP) for reducing pollutant discharges. A different system to meet stormwater quality objectives than that proposed by the applicant and currently permitted by the City may be required to meet future stormwater quality objectives and standards.

Absent existing City standards that meet the anticipated RWQCB requirements, this Final EIR assumes that the City will require that, at a minimum, the applicant demonstrate that proposed measures meet stormwater quality standards as it relates to stormwater quality using performance testing protocols that are intended to be consistent with the more stringent water quality requirements such as those used in the counties of Sacramento, Santa Clara, and Contra Costa.

Based on the anticipation of these new requirements in the City's future SWMP, the project would be required to provide documentation that the proposed stormwater quality devices can be expected to achieve an 80% reduction in total suspended solids (TSS). Acceptable protocols to meet these criteria include Guidance for Evaluating Emerging Stormwater Treatment Technologies – Technology Assessment Protocol – Ecology (Washington State University, January 2008) and Investigation of Structural Control Measures for New Development (Prepared by: Larry Walker Associates, Inc., November 1999 for Sacramento Stormwater Management Program).

It is understood that the CASQA Handbook does not endorse proprietary products, although many are described. Therefore, just because vortex separators are a listed manufactured BMP does not infer that it will achieve the required removal efficiency for the future City SWMP, if sized in accordance with the manufacturer's recommendations. A new mitigation measure has been added (4.4-2a) that sets forth the standards by which water treatment systems will be reviewed.

Furthermore, any type of underground BMP will require periodic maintenance. To ensure regular inspection and maintenance, the project's CC&Rs shall require that property owners agree in a signed statement, entitled "Maintenance Agreement," with the conditions outlined in Chapter 6 of the City's Storm Water Management Program. In addition, to ensure optimum performance of the stormwater treatment system, they shall

be inspected according to the manufacturer's specifications at minimum, to ensure that the system is operating according to City BMP standards and requirements as set forth in Mitigation Measure 4.4-2c in the DEIR.

2b-2 Hydrology & Water Quality – Control of Post-construction Urban Runoff

Potential adverse impacts resulting from increased rate, volume, and duration of runoff are typically streambed and bank erosion. These potential impacts should be considered from the outfall location on the site to the point at which discharges are contained to a pipe that discharges into Monterey Bay. The extent of the channel that could be exposed to increased runoff quantity include approximately 800 linear feet along the project boundary north (upstream) of Delaware Avenue and approximately 400 linear feet south of Delaware Avenue to where the channel flows into a pipe.

As stated in the DEIR (page 4-38), the "Arroyo Seco Creek was realigned in 2003 to its current location along the western border of the project site and was constructed to mimic a natural drainage course. The creek's channel bottom and sides are re-vegetated and rock check dams were installed in the flow line of the creek (Bowman & Williams, March 30, 2006). The new channel is also wider than the channel downstream. The Delaware Avenue culvert provides effective grade control for the channel upstream from it, which, combined with the rock check dams, vegetation and channel configuration, provide the channel upstream from Delaware Avenue with a low susceptibility to erosion. The channel between Delaware Avenue and where flows are confined to a pipe is heavily vegetated and does not appear to becoming incised.

As described in the Draft EIR, the creek improvements that have been constructed adjacent to the project include in-channel rock check dams and vegetation that controls erosion and provides ample capacity. Furthermore, the channel adjacent the project has been widened, thereby significantly reducing flow velocities, which may actually bring about deposition of sediments originating upstream from the project.

The Draft EIR reviewed project peak discharge rates during major storm events. Most of the site currently drains to Arroyo Seco Creek (even prior to its relocation), and the proposed project would continue drainage into the creek in a controlled fashion similar to the existing condition through a controlled storm drainage system that would limit flows to a 10-year storm event, consistent with current City requirements. Considering the existing and future project capacity requirements, and existing erosion control features in the creek adjacent to the proposed project, the installation of the site storm drainage and curtain drain system outfalls, whether at the upstream or downstream ends of the property are not anticipated to significantly impact the existing channel.

Furthermore, the applicant's engineer has indicated that energy dissipators will be installed at the outlet to reduce flow velocity, and as part of the outlet control structure, a weir system will provide flow protection over a series of storm events (Bowman and Williams, June 2008). Flow rates will be maintained at pre-development conditions, and thus, downstream erosion would not be anticipated as velocities will be maintained.

The channel downstream from the Delaware Avenue culvert extends less than 500 feet before it terminates into a pipeline which discharges into Monterey Bay. The channel downstream from Delaware Avenue is highly vegetated and has grade control established at the downstream end by the pipeline, thereby making it unlikely that significant erosion would be induced by increased low flows from the site. At low flows,

the vegetation in the channel adjacent to and downstream from the project may provide incidental additional water quality treatment before discharges reach Monterey Bay. Furthermore, the watershed, within the lower part of which the proposed project would be constructed, has substantial upstream development that would be expected to have already significantly impacted the frequency and duration of discharges in the creek.

Therefore, it is not anticipated that the project would not alter drainage patterns in a manner that would result in substantial erosion or siltation on- or off-site. Furthermore, discharge rates from curtain drains would be expected to be on the order of a few hundredths of a cubic foot per second. Flow rates that low would not be expected to be significant to either erosion or flood potential along the creek.

It is unlikely that even full implementation of typical hydromodification criteria (such as those adopted by Santa Clara and Contra Costa Counties as none have yet been established for the City) would have a significant impact on the potentially impacted non-engineered reaches of Arroyo Seco Creek. Consistent with future anticipated General Permit requirements per the City's new SWMP, the applicant would be required to provide additional calculations of potential impacts to Arroyo Seco Creek to demonstrate that the final design of detention facilities and their outlet controls do not negatively impact peak flow conditions in the creek as a result of modifying the timing of flows, and the recommended condition of approval on page 4-50 of the Draft EIR has been revised accordingly. See Chapter 2 – Revisions to Draft EIR.

2b-3 Hydrology & Water Quality – Incorporation of Low Impact Development Methods

Comment indicates that water quality and runoff flow and volume can be addressed by incorporating low impact development (LID) concepts into the project. With regards to the recommendations provided, the EIR mitigation measures require use of pervious pavement. The existing onsite tree will be maintained. The applicant has indicated that soil and perched groundwater conditions pose constraints to use of large-scale infiltration with swales.

As indicated in Response to Comment 2b-1, the city is in the process of prepared a new SWMP to be compliant with the Phase II Municipal Storm Water Permit. The SWMP will potentially increase the standard for what the City will be able to accept as the "maximum extent practicable" (MEP) for reducing pollutant discharges. MEP can be defined as the extent that can be achieved before the "cost would exceed and benefit to be derived" (State Water Resources Control Board Order No. WQ 2000-11). The applicant would be required to demonstrate that LID measures including, at a minimum, pervious pavement, planter boxes and grass swales have been implemented into the site plan to the MEP.

The benefit that can be derived from implementation of LID measures would consider the ability of the measures to reduce flow volumes and improve water quality of runoff discharged from the site in the creek. The benefit of small delays of runoff into the creek are not expected to be significant because relatively short delays of discharges may cause discharges from the site to be closer to being coincident with peak discharges from upstream flows. Therefore, the focus of the LID measure implementation should be on runoff volume control by retention. Retention systems may contain underdrains that restrict discharge rates enough so that release rates would not negatively impact the creek.

However, the determination of MEP implementation of LID would also consider that the physical configuration of the channel adjacent to, and downstream from the project does not appear to be susceptible to a significant amount of erosion. Additionally, the project location is relatively far downstream within a developed watershed, which can also reduce the potential benefits from LID. Therefore, the benefit of meeting strict numerical criteria such as no increase in runoff volume during specific design events or allowing only very limited effective impervious area is expected to be relatively low.

2b-4 Hydrology & Water Quality – Phase II Municipal Storm Water Permit (General Permit)

Comment is noted regarding upcoming General Permit requirements for the City of Santa Cruz. The City is in the preliminary stages of preparing a working with a new Storm Water Management Plan (SWMP) to be compliant with the Phase II Municipal Storm Water Permit (General Permit). It is anticipated that the SWMP will increase the standard for what the City will be able to accept as the "maximum extent practical" (MEP) for addressing post-construction runoff.

Absent existing City standards that meet the anticipated RWQCB requirements, this Final EIR assumes that the City will require that, at a minimum, the applicant implement LID to the MEP. The MEP will consider construction costs, impacts to the preferred land plan, and the potential impact to the creek considering it current configuration and hydrology.

To demonstrate that the MEP objective is satisfied, site design would be required to incorporate low impact development (LID) measures to the MEP without changing the development density. MEP can be defined as the extent that can be achieved before the "cost would exceed and benefit to be derived" (State Water Resources Control Board Order No. WQ 2000-11). The applicant would be required to demonstrate that LID measures including, at a minimum, such techniques as pervious pavement, planter boxes and grass swales, etc. have been implemented into the site plan to the MEP.

2b-5 Hydrology & Water Quality –Cost/Benefit Rational for LID vs. BMPs

Comment is noted.

Department of Toxic Substances Control

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

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

April 21, 2008

Ms. Sandy Brown
City of Santa Cruz
Planning and Community Development Department
809 Center Street, Room 107
Santa Cruz, California 95060

Dear Ms. Brown:

2120 DELAWARE MIXED USE PROJECT, SANTA CRUZ, CALIFORNIA-
DRAFT ENVIRONMENTAL IMPACT REPORT, SCH #2007012097

Thank you for the opportunity to comment on the Draft Environmental Impact Report (EIR) for the 2120 Delaware Mixed-Use Project in Santa Cruz, California. As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a potential Responsible Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project pursuant to the California Environmental Quality Act (CEQA) adequately addresses any remediation activities which may be required to address any hazardous substances release.

The proposed project includes a Vesting Tentative Subdivision Map for a 45-lot subdivision. The 45 lots would be divided into residential and business condominium units. The ground floor would consist entirely of industrial and/commercial development and residential developments would be located on the upper floors. The Draft EIR states that the project area is currently vacant and was used for agriculture in the past. However, it does not include a detailed description of the project area's historical uses, including any previous structures and use/storage of hazardous substances. This information may be in the Phase I Environmental Site Assessment (ESA) which is not included as an appendix to the EIR. A more detailed historical assessment of past uses should be performed to determine any sources of hazardous substance contamination onsite if one has not already been performed as part of the Phase I ESA.

Since there is a potential release of hazardous substances onsite from past agricultural uses of the project area and discarded lead-acid batteries and other wastes, we recommend that a Phase II ESA be conducted that includes soil and groundwater sampling prior to the conclusion of the CEQA evaluation The sampling results should be provided and any screening levels or criteria that are used in making a determination whether detected contaminants are found at concentrations that pose a risk to human health or the environment should be identified.

DTSC can assist your agency in overseeing investigation and remediation activities through our Voluntary Cleanup Program. A fact sheet describing this program is enclosed. We are aware that projects such as this one are typically on a compressed schedule, and in an effort to use the available review time efficiently, we request that DTSC be included in any meetings where issues relevant to our statutory authority are discussed.

Please contact Remedios Sunga of my staff at (510) 540-3840 or by e-mail at rsunga@dtsc.ca.gov if you have any questions or would like to schedule a meeting. Thank you in advance for your cooperation in this matter.

Sincerely,

Mark E. Piros

Mark E. Piros
Supervisor
Brownfields and Environmental Restoration Program
Berkeley Office

Enclosure

cc: without enclosure

Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street
Sacramento, California 95814

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

California Environmental Protection Agency
Department of Toxic Substances Control

The Voluntary Cleanup Program

The California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) has introduced a streamlined program to protect human health, cleanup the environment and get property back to productive use. Corporations, real estate developers, local and state agencies entering into Voluntary Cleanup Program agreements will be able to restore properties quickly and efficiently, rather than having their projects compete for DTSC's limited resources with other low-priority hazardous waste sites. This fact sheet describes how the Voluntary Cleanup Program works.

Prior to initiation of the Voluntary Cleanup Program, project proponents had few options for DTSC involvement in cleaning up low-risk sites. DTSC's statutory mandate is to identify, prioritize, manage and cleanup sites where a release of hazardous substances has occurred. For years, the mandate meant that, if the site presented grave threat to public health or the environment, then it was listed on the State Superfund list and the parties responsible conducted the cleanup under an enforcement order, or DTSC used state funds to do so. Because of staff resource limitations, DTSC was unable to provide oversight at sites which posed lesser risk or had lower priority.

DTSC long ago recognized that no one's interests are served by leaving sites contaminated and unusable. The Voluntary Cleanup Program allows motivated parties who are able to fund the cleanup -- and DTSC's oversight -- to move ahead at their own speed to investigate and remediate their sites. DTSC has found that working cooperatively with willing and able project proponents is a more efficient and cost-effective approach to site investigation and cleanup. There are four steps to this process:

- / Eligibility and Application
- / Negotiating the Agreement
- / Site Activities
- / Certification and Property Restoration

The rest of this fact sheet describes those steps and gives DTSC contacts.

October 2002

The Voluntary Cleanup Program

Step 1: Eligibility and Application

Most sites are eligible. The main exclusions are if the site is listed as a Federal or State Superfund site, is a military facility, or if it falls outside of DTSC's jurisdiction, as in the case where a site contains only leaking underground fuel tanks. Another possible limitation is if another agency currently has oversight, e.g., a county (for underground storage tanks). The current oversight agency must consent to transfer the cleanup responsibilities to DTSC before the proponent can enter into a Voluntary Cleanup Program agreement. Additionally, DTSC can enter into an agreement to work on a specified element of a cleanup (risk assessment or public participation, for example), if the primary oversight agency gives its consent. The standard application is attached to this fact sheet.

If neither of these exclusions apply, the proponent submits an application to DTSC, providing details about site conditions, proposed land use and potential community concerns. No fee is required to apply for the Voluntary Cleanup Program.

Step 2: Negotiating the Agreement

Once DTSC accepts the application, the proponent meets with experienced DTSC professionals to negotiate the agreement. The agreement can range from services for an initial site assessment, to oversight and certification of a full site cleanup, based on the proponent's financial and scheduling objectives.

The Voluntary Cleanup Program agreement specifies the estimated DTSC costs, scheduling for the project, and DTSC services to be provided. Because every project must meet the same legal and technical cleanup requirements as do State Superfund sites, and because DTSC staff provide oversight, the proponent is assured that the project will be completed in an environmentally sound manner.

In the agreement, DTSC retains its authority to take enforcement action if, during the investigation or cleanup, it determines that the site presents a serious health threat, and proper and timely action is not otherwise being taken. The agreement also allows the project proponent to terminate the Voluntary Cleanup Program agreement with 30 days written notice if they are not satisfied that it is meeting their needs.

Step 3: Site Activities

Prior to beginning any work, the proponent must have: signed the Voluntary Cleanup Program agreement; made the advance payment; and committed to paying all project costs, including those associated with DTSC's oversight. The project manager will track the project to make sure that DTSC is on schedule and within budget. DTSC will bill its costs quarterly so that large, unexpected balances will not occur.

Once the proponent and DTSC have entered into a Voluntary Cleanup Program agreement, initial site assessment, site investigation or cleanup activities may begin. The proponent will find that DTSC's staff includes experts in every vital area. The assigned project manager is either a highly-qualified Hazardous Substances Scientist or Hazardous Substances Engineer. That project manager has the support of well-trained DTSC toxicologists, geologists, industrial hygienists and specialists in public involvement.

The project manager may call on any of these specialists to join the team, providing guidance, review, comment and, as necessary, approval of individual documents and other work products. That team will also coordinate with other agencies, as appropriate, and will offer assistance in complying with other laws, such as the Resource Conservation and Recovery Act.

Step 4: Certification and Property Restoration

When remediation is complete, DTSC will issue either a site certification of completion or a "No Further Action" letter, depending on the project circumstances. This means "The Site" is now property that is ready for productive economic use.

To learn more about the Voluntary Cleanup Program, contact the DTSC representative in the Regional office nearest you:

Southern California
Tedd Yargeau
1011 North Grandview Avenue
Glendale, California 91201
(818) 551-2864

Central California
Tim Miles
8800 Cal Center Drive
Sacramento, CA 95826-3200
(916) 255-3710

North Coast California
Lynn Nakashima Janet Naito
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
(510) 540-3839 (510) 540-3833

Central California - Fresno Satellite
Tom Kovac
1515 Tollhouse Road
Clovis, California 93612
(209) 297-3939

(Revised 10/18/02)

Response to Comment Letter # 3
Department of Toxic Substances Control
April 21, 2008

3-1 Hazardous Materials – Phase 1 Adequacy

The Phase 1 Environmental Site Assessment (ESA) was completed by Remediation, Testing & Design, Inc. (RTD), in December 2004 for Redtree Properties. In June 2008, Weber, Hayes & Associates (WHA), a hydrology and environmental engineering firm, reviewed the abovementioned Phase 1 ESA to determine its adequacy.

It is WHA's opinion that the Phase I ESA prepared for the proposed project includes an adequate and thorough review of historical uses and a professional assessment on the potential for onsite and/or offsite sources of contamination to impact the Site. This review indicates that the Phase I ESA documented:

1. The site has remained undeveloped (no site structures) since 1970. Prior to 1970, the only documented land use at the site has been agricultural.
2. Previous environmental investigations have been conducted at the site and on the adjoining property. An onsite, screening of shallow soil and groundwater was completed in 1996 as part of a potential property transaction. Limited impacts were detected near a former railroad spur (motor oil to control weeds). Off-site soil and groundwater sampling has been conducted since 1992, targeting existing solvent plume originating at the adjacent property to the east (former SCI facility at 411 Swift Street).

WHA determined that the Phase 1 ESA was prepared in 2004 for the existing owners (Redtree Properties), and the onsite use of the property has not changed since the report was completed. Therefore, WHA concluded that information on historical and offsite potential sources of contamination remains valid.

3-2 Hazardous Materials – Phase 2 Recommendation

As discussed in Response to Comment 3-1, in June 2008 Weber, Hayes & Associates (WHA) reviewed the Phase 1 Environmental Site Assessment (ESA) conducted for the proposed project. The Phase I ESA included a site inspection to document current conditions and a historic review of previous land use, including a check of historic air photos (1928-2003). There were no current or historic records identified in the Phase I ESA report that documents an accumulation of discarded lead-acid batteries or other wastes at the site. Sampling for these items would be random and does not appear justified. Therefore, preparation of Phase 2 ESA based on the potential for occurrence of discarded lead-acid batteries would not be warranted.

The Phase I ESA review of historic aerial photographs documented that the site was used for agriculture from at least 1928 through 1968, but there are no records documenting specific pesticide use at the Site. However, there are a number of "persistent pesticides" of concern that were used during that era, which include organochlorine pesticides, especially DDT and its metabolites, DDE and DDD.

DTSC has developed shallow soil screening protocols that target testing of organochlorine pesticides prior to agricultural land use conversion[14]. WHA reviewed the DTSC shallow soil screening protocols that target testing of organochlorine pesticides prior to agricultural land use conversion and prepared a soil sampling plan for the project site (see the attached Appendix I – Soil Sampling Plan for Persistent Pesticides at 2120 Delaware Avenue, dated May 30, 2008).

As a result of the Weber, Hayes & Associates review, the Draft EIR text has been revised to include an additional recommended condition of approval related to Impact 4.3-3. The recommended condition of approval requires performance of the tests for the potential presence of organochlorine pesticides prior to grading and implementation of all recommendations contained in the Soil Sampling Plan for Persistent Pesticides Soil Sampling Plan for Persistent Pesticides at 2120 Delaware Avenue, prepared by WHA, dated May 30, 2008 (see Appendix I).

3-3 Hazardous Materials – DTSC Assistance

Comment is noted regarding the Department's role in overseeing investigation and remediation activities through its Voluntary Cleanup Program. No further action is required.

14 Interim Guidance for Sampling Agricultural Fields, California Department of Toxic Substances Control, August 26, 2002.

STATE OF CALIFORNIA--BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TDD (805) 549-3259
http://www.dot.ca.gov/dist05/

Flex your power!
Be energy efficient!

April 29, 2008

SCr 1-19.69
SCH# 2007012097

Ms. Sandy Brown
City of Santa Cruz
Planning and Community Development
809 Center Street, Room 107
Santa Cruz, CA 95060

Dear Ms. Brown:

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE DELAWARE MIXED USE PROJECT

The California Department of Transportation (Department), District 5, Development Review, has reviewed the above referenced project and has the following comments.

1. The Department continues to support local development that is consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel and development.

2. Although we appreciate that a traffic study was completed, it has not been stamped by the "Responsible Charge" California Licensed Civil Engineer who made the recommendations contained within the study. The laws that govern the signing and sealing of civil, electrical, and mechanical engineering documents are contained in Business and Professions Code sections 6735, 6735.3, and 6735.4 and in Rule 411. These laws bear and permit the following, "All documents (interim and final) must bear the name and license number of the professional engineer in responsible charge." Please insure that all future traffic studies that are submitted for review are signed and sealed by the appropriate party.

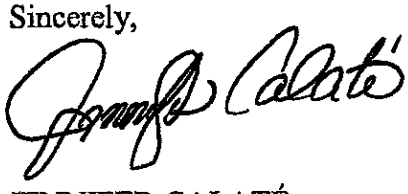
3. Notwithstanding the above, it appears from Exhibit 12 that there is inadequate storage space for northbound AM traffic volumes turning left from Mission Street to Swift Street following project build out. Inadequate storage in the turn pocket will have an adverse impact to Mission Street and should be mitigated accordingly.

4. Although we appreciate that the project will be required to contribute to Highway 1/Highway 9 intersection improvements, it is our position that the proposed improvements will not bring the intersection to an acceptable Level of Service (LOS).

5. The traffic study did not include impacts to Highway 1 or Highway 17 which both currently operate at LOS F. Because the Department is responsible for the safety, operations, and maintenance of the State transportation system, our LOS standards should be used to determine the significance of the project's impact. We endeavor to maintain a target LOS at the transition between LOS C and LOS D on all State transportation facilities. In cases where a State facility is already operating at an unacceptable LOS, any additional trips added should be considered a significant cumulative traffic impact, and should be mitigated accordingly.

If you have any questions, or need further clarification on the items discussed above, please do not hesitate to call me at (805) 549-3099 or e-mail jennifer.calate@dot.ca.gov.

Sincerely,



JENNIFER CALATÉ
Associate Transportation Planner
District 5 Development Review Coordinator

Response to Comment Letter # 4
Department of Transportation
April 29, 2008

4-1 Coordination with Local Jurisdictions

Comment regarding Caltrans efforts to work in coordination with local jurisdictions is noted and referred to City staff and decision makers for further consideration.

4-2 Traffic and Transportation – Responsible Charge

Comment regarding the request that all future traffic studies bear the name and license number of the professional engineers in responsible charge is noted and referred to City staff and decision makers for further consideration.

4-3 Traffic and Transportation –Mission Street / Swift Street

The comment indicates that there is inadequate storage space for northbound AM traffic volumes turning left form Mission Street to Swift Street under buildout of the proposed project. Under project buildout and cumulative conditions, the Mission Street / Swift Street intersection is projected to operate at an acceptable LOS of C and D, respectively. The City's significance criteria for transportation for environmental documents is limited to the level of service at the intersection. As the LOS for this intersection remains at an acceptable level of service with the project development it is not considered a significant impact. However, the City of Santa Cruz Traffic Improvement Program identified this concern, recommended adding a second left turn lane at the northbound Route 1 approach. The City's traffic impact fee includes this improvement. The project's required payment of this development will provide the project's fair share of this improvement.

4-4 Traffic and Transportation – Highway 1 / Highway 9

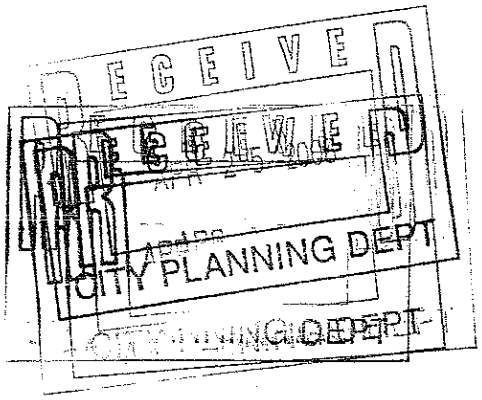
Comment regarding Caltrans position that the proposed improvements at the Highway 1/Highway 9 intersection will not bring the intersection to an acceptable level of service is noted. The City's consultant BKF and Hexagon have completed the Traffic Operational Analysis for the Rte 1/9 intersection in coordination with Caltrans District 4 staff. The analysis in this document independently confirms the (LOS is C in the AM and D in the PM) analysis in the Delaware EIR traffic.

4-5 Traffic and Transportation –Impacts to Highway 1 and Highway 17

As described in the DEIR starting on page 5-29, the DEIR addressed impacts to Highway 1 and Highway 17. The analysis concluded that the proposed project, as well as other cumulative local and regional projects and visitor growth, will contribute to cumulative congestion on these highway segments, which currently operate at LOS F. There are long-term improvement plans for Highway 1, and no plans to widen Highway 17. The addition of daily project trips (360 on Highway 17 and 910 on Highway 1) are well within the cumulative volumes forecast by Caltrans, which serve as the basis for adopted route concepts for these highway segments. Thus, the project would not result in a considerable cumulative contribution to cumulative highway traffic congestion.

STATE OF CALIFORNIA — Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



April 23, 2008

Sandy Brown
City of Santa Cruz
809 Center Street, Room 107
Santa Cruz, CA 95060

Re: Notice of Completion, DEIR
2120 Delaware Mixed Use Project
SCH# 2007012097

Dear Ms./Mr. Brown:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

The Commission requests that the CEQA documentation for the proposed project evaluate potential project-related rail safety impacts. In addition to the potential impacts of the proposed project itself, the CEQA document should consider cumulative rail safety-related impacts created by other projects. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians. As described in the DEIR, the project site is bordered by the Union Pacific railroad line and right-of-way on the north. The proposed project would increase vehicular and pedestrian traffic in the vicinity. However, the DEIR does not consider potential rail safety impacts of the proposed project.

Measures to reduce adverse impacts to rail safety also should be considered in the CEQA documentation. General categories of such measures include:

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption
- Installation of median separation to prevent vehicles from driving around railroad crossing gates

- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing. If the project includes a proposed new crossing, the CPUC will be a responsible party under CEQA and the impacts of the crossing must be discussed in its CEQA documentation.

Thank you for your consideration of these comments. If you have any questions in this matter, please call me at (415) 703-1306.

Very truly yours,

Daniel Kevin
Regulatory Analyst
Consumer Protection and Safety Division

cc:

Terrel A. Anderson
Manager, Industry and Public Projects
Union Pacific Railroad
9451 Atkinson St.
Roseville, CA 95747

Response to Comment Letter # 5
Public Utilities Commission
April 23, 2008

5-1 Traffic and Transportation – Railroad Safety

An existing railroad crossing is located on Swift Street where it intersects the railroad. Safety features includes a railroad crossing gate with warning lights and double-stripped painted line on both sides of the tracks. Additionally, posted warning signs and painted railroad crossing warning signs are installed for both north and southbound vehicular traffic on Swift Street. An existing sidewalk is located on both sides of the streets. An average of three trains per week travel on this line per week. No incidents of traffic collisions with trains have ever been reported by the City at this railroad crossing.

Furthermore, the proposed project is an infill project located in an already urbanized area within the City of Santa Cruz. While the project would contribute additional new vehicular trips along Swift Street, the DEIR concluded that there would be no significant impacts to traffic along this segment of Swift Street.

Given the fact that safety notification features and improvements exist, the low frequency of train trips, the uncertain future use of the railroad, and the absence of any past incidents to indicate a potential for risk, additional safety improvements to the railroad crossing is not considered necessary.

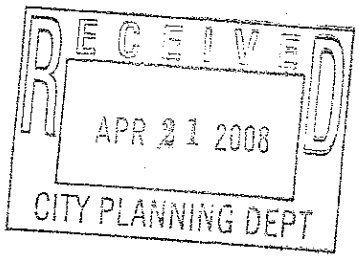
5-2 Traffic and Transportation – CPUC Jurisdiction

Comment regarding CPUC's jurisdiction over railroad crossings is noted and referred to City staff and decision makers for further consideration.

Local Agencies

AMBAG
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

April 14, 2008



Ms. Sandy Brown
City of Santa Cruz
Planning and Community
Development Dept.
809 Center Street, Room 107
Santa Cruz, CA 95060

RE: MCH# 20080311 – Notice of Completion for the Draft Environmental Impact Report for 2120 Delaware Mixed Use Project

Dear Ms. Brown:

AMBAG's Regional Clearinghouse circulated a summary of notice of your environmental document to our member agencies and interested parties for review and comment.

The AMBAG Board of Directors considered the project on **April 12, 2008** and has no comments at this time.

Thank you for complying with the Clearinghouse process.

Sincerely,

Nicolas Papadakis
Executive Director

Response to Comment Letter # 6
Association of Monterey Bay Area Governments
April 14, 2008

6-1 Board of Directors Consideration

Comment is noted. No further action is required.

Minutes
Planning Commission
Regular Meeting
7:00 p.m. - Thursday - April 3, 2008
City Council Chambers, 809 Center Street

Call to Order — 7:00 PM

Roll Call — Bill Schultz, Chair; Scott Daly; David Foster; Larry Kasparowitz; Rod Quartararo; Mari Tustin; Judy Warner

Present — Bill Schultz, Chair; Scott Daly; David Foster (7:01); Larry Kasparowitz; Rod Quartararo; Mari Tustin; Judy Warner

Absent — None

Staff — Acting Director Alex Khoury; Principal Planner Eric Marlatt; Contract Planner Sandy Brown; Environmental Consultant Stephanie Strelow; Administrative Assistant Maggie Schwarb; Court Reporter Heather; Recorder Tom Graves

Statements of Disqualification — None

Oral Communications — None
No action shall be taken on these items.
The Chair may announce and set time limits at the beginning of each agenda item.

Announcements –

Approval of Minutes – March 20, 2008

ACTION: **Commissioner Quartararo moved and Commissioner Foster seconded the Planning Commission APPROVE the Minutes of March 20, 2008 on a vote of 5/0/2, Commissioners Daly and Warner abstaining.**

Public Hearings –

ACTION: **Commissioner Warner moved and Commissioner Tustin seconded that the Planning Commission hear Item #2 first, and then Item #1 on a unanimous vote of 7/0.**

2. 1024 Soquel Ave. 07-184 APN 010-072-78

Subdivision, Administrative Use Permit and Design Permit to construct four residential and three commercial condominium units in a three-story building in the C-C zone district. (Environmental Determination: Categorical Exemption) (J. Swift & D. Hamilton, owners/filed: 11/2/07) **MF**

RECOMMENDATION: That the Planning Commission recommend to the City Council acknowledgement of the environmental determination and approval of the Tentative Map, Administrative Use Permit and Design Permit based on the Findings contained in the attached draft resolution and the Conditions of Approval (Exhibit A).

ACTION: Commissioner Warner moved and Commissioner Kasparowitz seconded the Planning Commission CONTINUE Item #2, 1024 Soquel Ave., to a date certain of May 1, 2008 on a unanimous vote of 7/0.

1. 2120 Delaware Ave. 05-285 APNs: 003-121-01; 003-081-01; 003-032-01

Environmental Impact Report, Vesting Tentative Subdivision Map for a 45-lot subdivision (plus 11 common area lots) to accommodate a mixed-use industrial-residential project, and Planned Development, Design, Coastal, Special Use, and Watercourse Development Permits, a Development Agreement, and a Sign Program with the maximum build-out of 535,553 square feet of development (with up to 145 industrial/commercial condominiums and up to 248 residential condominiums) in the IG/PERS/CZO/SPO zone district. (Redtree Properties, owner/filed: 12/19/05) **SB**

RECOMMENDATION: That the Planning Commission take oral comments on the Draft Environmental Impact Report.

Chairperson Schultz said the City is preparing the EIR for this project, and that the CEQA process is ongoing. The Draft EIR has been completed to date, and part of that process is the opportunity for the public to comment on it before the Planning Commission. He said the Commission would prefer comments in writing, but oral comments are welcome as well. He explained that the purpose of this hearing tonight is to consider the Draft EIR and the process itself, and not the project.

Acting Director Khoury introduced Principal Planner Marlatt.

Principal Planner Marlatt said the purpose of this meeting was to familiarize commissioners with the project, and to give the public an opportunity to comment on the EIR process itself. He said this public comment is optional per the requirements of CEQA (The California Environmental Quality Act), but the department felt it was appropriate. Marlatt said the applicant, Craig French, was here to answer questions as well as the environmental consultant, Bill Wiseman.

Contract Planner Sandy Brown made the staff presentation.

Consultant Stephanie Strelow spoke to the application, and the EIR process.

The Public Hearing was opened.

Fred Geiger

Reed Searle

The Public Hearing was closed.

Commissioners Kasparowitz and Quartararo suggested that a table be composed of the different alternatives to the project, so Commissioners and the public could see the different scenarios at a glance.

Commissioner Kasparowitz wants to see more information on the impacts per each phase. He also said the live/work lofts could become almost totally residential but then won't produce any commercial revenue, becoming a net drain. He suggested staff talk to Oakland and San Francisco because they have experienced a similar situation.

Commissioner Quartararo suggested a table be included that makes comparisons of the alternatives, and that a similar table be done for the different phases.

Commissioner Foster said that the DEIR, on page 4-72, is missing Bayview Elementary School. He said the number of kids estimated to be added by this project should be included as a part of the DEIR and, more specifically, the type of childcare necessitated by the project should be included as well.

Commissioner Tustin inquired where kids would play in this project, and suggested a playground for children. She said there seems to be no place for families in these plans.

Commissioners inquired about use of the rail corridor, and also the need to accommodate the 58 anticipated children.

ACTION: The Planning Commission heard comments from the public and took no action.

General Business – None.

Information Items – None

No action shall be taken on these items.

Subcommittee/Advisory Body Oral Reports –

No action shall be taken on these items.

- **Chairperson's Report (B. Schultz)**
- **Planning Department Report (E. Marlatt)**

Items Referred to Future Agendas — None

Adjournment — 8:48 PM

The next Planning Commission meeting will take place on April 17, 2008 in the City Council Chambers.

Any writing related to an agenda item for the open session of this meeting distributed to the Planning Commission less than 72 hours before this meeting is available for inspection at the City Planning Department, 809 Center Street, Room 107 or on the City's website www.ci.santa-cruz.ca.us. These writings will also be available for review at the Planning Commission meeting in the public review binder at the rear of the Council Chambers.

APPEALS - Any person who believes that a final action of this advisory body has been taken in error may appeal that decision to the City Council. Appeals must be in writing, setting forth the nature of the action and the basis upon which the action is considered to be in error, and addressed to the City Council in care of the City Clerk.

Appeals must be received by the City Clerk within ten (10) calendar days following the date of the action from which such appeal is being taken. An appeal must be accompanied by a five hundred dollar ($500) filing fee, unless the item involves a Coastal Permit that is appealable to the Coastal Commission, in which case there is no fee.

PLANNING COMMISSION REGULAR MEETING

ORAL COMMENTS ON 2120 DELAWARE AVENUE

Thursday, April 3, 2008

ORIGINAL

Taken at 809 Center Street, Council Chambers, Santa Cruz, California, before Heather Cortazzo, CSR No. 10693, State of California.

APPEARANCES:

BILL SCHULTZ, CHAIR

SCOTT DALY, COMMISSIONER

DAVID FOSTER, COMMISSIONER

LARRY KASPAROWITZ, COMMISSIONER

ROD QUARTARARO, COMMISSIONER

MARI TUSTIN, COMMISSIONER

JUDY WARNER, COMMISSIONER

ALEX KHOURY, ACTING DIRECTOR

ERIC MARLATT, PRINCIPAL PLANNER

STEPHANIE STRELOW, CONSULTANT

SANDY BROWN, CONTRACT PLANNER

TOM GRAVES

Members of the Public:

FRED GEIGER
REED CHERYL

Santa Cruz, California; April 3, 2008

7:00 p.m. - 8:23 p.m.

This board is open for public comment. I want to encourage people to be brief, not to repeat yourselves and also to sign in at your register either before or after you speak. So if you want to address this board, please come forward.

MR. GRAVES: Do you want a time limit?

THE CHAIR: I really want to encourage the public to say what they need to say. Normally we put a three-minute time limit on here. And I don't really want to do that tonight because I want it just to be kind of an open hearing. If on the other hand, if someone is wasting our time by repeating, I'm going to reserve the right to cut you off. So hopefully everyone will be succinct.

MR. GEIGER: Thank you. I appreciate that. I'm used to three minutes, so four will sound like a lot to me.

Fred Geiger speaking for Santa Cruz for Responsible Planning. Sorry about the allergy thing here.

We wanted to get these comments on the record. If I could get a clarification. I'm a little confused.

I heard that we needed to keep this to EIR only, but then I also think I heard a comment that it was also open for general comments.

THE CHAIR: Could staff clarify that.

MR. KHOURY: This period is just for comments on EIR. The previous questions were just allowing for the Planning Commission to ask questions.

THE WITNESS: I get it. Thank you. Okay. I will stick specifically to EIR related comments.

I think the commissioners have already mentioned these, but we want to get these on the record from our group. The three main areas of concern are traffic impacts, parking and water as you've identified already.

The traffic impacts are not fully mitigated according to the EIR. There are 5,000 trips into this area, this planned development in a residential single-family area on three sides of the development. There's also the questions of cumulative traffic impacts. There's about 21,000 trips -- that's a big number of automobile trips -- when you include the expanded Safeway, tourist point developments and the expanded New Leaf. So how is that going to work? It's already not mitigated just for this one project. And when you have the cumulative, it could be a nightmare.

Parking, I did a quick calculation here. The staff report says it's possibly 575 spaces short. If you multiple that out at the rate of 200 square feet per car, it comes to 115,000 square feet, which is equal approximately to 25 standard 5,000 foot city lots. 25 standard city lots, that's like a couple of long blocks. What are we going to do with the cars? We can't just fluff these numbers off and hope it turns out alright. This is the largest development probably in the history of the city of Santa Cruz. We have to take these numbers seriously. 5,000 trips a day and 575 cars.

I would encourage everyone on the Planning Commission to go out to Delaware Avenue -- I live near there -- on a business day in the afternoon and look at Delaware Avenue. It's about 90 percent full of cars right now from the neighboring businesses.

So if we are going to have 500 or so cars overflowing from this project, they are going to be going blocks in every direction into these residential neighborhoods. I think that's completely unacceptable and unnecessary.

The water issue has been mentioned. Once again, where is it going to come from? You can give them the permit, but what kind of legal liability is that going to get the city into? You have to be very

careful that there is no legal liability. If the city issues permits, is there a liability for the city to supply that water? What if it's not available? Those are our main concerns.

I have to say that it appears that the EIR suggests the alternative number three as a recommended alternative. It does minimize many of the problems. I think that's what we probably need to be looking at. Thank you for your time.

THE CHAIR: Thank you.

MR. CHERYL: Reed Cheryl. I hope I don't have to pass an examination on everything that's been happening here tonight. I want to talk only for a moment about --

THE CHAIR: Can you identify yourself, please, sir.

MR. CHERYL: I'm sorry. Reed Cheryl. I want to talk about traffic. It's a conceptual question.

The EIR talks only about intersection improvements and it talks about TIF as a matter of expediting that or paying for those intersection improvements. That's not the issue or at least that's not the entire issue. We have some 5,000 cars a day added to this area. And what we are worried about is traffic moving down Swift Street, moving down West

Cliff, moving down adjacent neighborhoods to minimize traffic. And there's nothing in the EIR directing our attention to how we are going to protect the neighborhoods and how we are going to protect the streets immediately adjoining the project. And I don't know if the EIR can talk about that. We are going to submit written comments, but I think it's the quality of life in the community that we are concerned about. And the project is going to have a substantial affect on that.

I want to also mention that the cumulative traffic, according to the EIR, 27,000 daily trips -- well, that's alright, but the SCCRTC traffic report of 2005 said that there are now -- 2005 -- 28,578 trips per day on Mission Street alone. That's just not consistent with what the EIR -- the draft EIR is saying. The only reason I mention that is that suggests to me we ought to get the numbers right.

I await some possible, you know, explanation of what can happen to protect the neighborhoods and all of the adjoining streets as a result of this project and of the cumulative projects, which according to the numbers, about 14,000 new trips from projects already approved, including this one.

THE CHAIR: Thank you. There's got to be

someone else who wants to speak?

MR. GEIGER: I'll speak again if it helps.

THE CHAIR: Then we will close this public hearing and we will return it to our board for review and discussion.

///

///

///

I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed by name.

Dated: April 21, 2008

H. Cortazzo

HEATHER M. CORTAZZO
CSR NO. 10693

Response to Comment Letter # 7
City of Santa Cruz Panning Commission
April 3, 2008

7-1 Alternatives – Alternatives Summary

The Draft EIR Table 5-16: Impact Comparison of Alternatives Relative to the Proposed Project (located on DEIR page 5-55) provides an overview of the proposed alternatives, the proposed project, and the potential impacts associated with each.

7-2 Environmental Analysis – Impacts per Phase

As discussed in the Draft EIR, the proposed project does not include phasing. Instead, the project development would be developed based on market conditions, with the full buildout anticipated to occur within 15 years. As indicated on page 3-9 of the Draft EIR, the project is proposed to meet market demands, and a development schedule has not been determined. However, the applicant provided examples to illustrate probable development of the site over the first three years and the first seven years. Project impacts were analyzed in view of the full buildout of the proposed project as that approach provided a worst-case scenario. Where appropriate, impacts associated with the potential development in the years 1-3 and 1-7, were included in the analysis as well (please see impact section in Air Quality, Transportation and Traffic, and Public Service and Utilities – Water Supply).

7-3 General Statement – Live/Work Balance

Comment regarding maintaining a live/work balance, which would not drain the City's resources is noted and referred to City staff and decision makers for further consideration.

7-4 Alternatives – Alternatives Summary and Phasing

Please see Response to Comments 7-1 and 7-2.

7-5 Public Service and Utilities – Schools

While the Bay View Elementary School is located closer to the project site than the Westlake Elementary School, the project site is not be served by this school (see Figure 4.6- 2: Santa Cruz City School District Attendance Boundaries).

The Draft EIR text and the table title has been changed to clarify that the schools listed in Table 4.6-1: Santa Cruz City School District Nearby Schools, are those that will be serving the project site. Please see Chapter 2: Revisions to the Draft EIR, to see the revised Draft EIR text and Figure 4.6- 2: Santa Cruz City School District Attendance Boundaries.

7-6 Public Service & Utilities – School Impacts

Project impacts to existing school enrollments are discussed on pages 4-87 and 4-88 of the Draft EIR. As indicated approximately 42 school-aged students would be expected from the project based on School District student generation rates and the type of residential units being proposed.

The type of childcare facilities that may be necessitated by the project is not an issue for evaluation under CEQA. It should be noted that both small and large family daycare facilities are included in the applicant's list of proposed allowable uses for the project.

7-7 Playground

See Master Response PSU-1 – Parks and Recreation.

7-8 Transportation and Traffic – Use of Rail Corridor

Regarding the use of the rail corridor, please see Response to Comment 9-7.

7-9 Public Service & Utilities – Public Comments

Planning Commission opened hearing to public comments as follows.

7-10 Traffic and Transportation – Project Impacts and Neighborhood Impacts

Project traffic impacts would be fully mitigated as discussed on pages 4-63 to 4-67 in the Draft EIR. Under cumulative conditions, improvements to Mission Street/King Street and Mission/Chestnut intersections will help reduce delays, but the Draft indicates that the intersection level of service (LOS) would not be improved to acceptable levels during the PM peak hour.

Localized traffic impacts, particularly to nearby residential areas was found to be limited to the intersection of Swift and Delaware, which would be improved at 50 percent buildout with either a traffic signal or a roundabout. Because a significant majority of the traffic is projected to travel to north on Swift Street to Mission Street, no significant impacts to adjacent residential neighborhoods is anticipated.

7-11 Traffic and Transportation – Cumulative Impacts

As described in the DEIR starting on page 5-24, cumulative development and growth would result in significant cumulative impacts at five intersections (Delaware/Swift, Mission/Bay, Mission/King, Mission/Chestnut and Highway 1/Highway 9). The Delaware/Swift intersection will be improved to an acceptable level with implementation of mitigation measures included in this EIR. The project will be required to pay the City's Traffic Impact Fee, which will go toward funding identified improvements at the other four intersections and will contribute the project's share to cumulative mitigation at these intersections. The Bay/Mission and Highway 1/Highway 9 intersections would be improved to an acceptable level of service. However, while improvements to the Mission Street/King Street and Mission/Chestnut intersections will help reduce delays, intersection LOS would not be improved to acceptable levels during the PM peak hour.

7-12 Traffic and Transportation – Parking Deficiency

See Master Response T-1 – Parking Demand and Supply.

7-13 Water Supply – City Liability

Please see Master Response WS-1.

7-14 Alternatives – Support for Alternative 3

Comment regarding support for Alternative 3 is noted and referred to City staff and decision makers for further consideration.

7-15 Traffic and Transportation – Neighborhood Traffic Impacts

Delaware and Swift streets are collector streets that accommodate both commercial and residential traffic. The traffic impact analysis concluded that with the proposed mitigation to install a traffic signal or roundabout at the Delaware Avenue/Swift Street intersection, these additional trips would not result in a significant impact to this roadway segment.

Existing conditions at the intersection of Delaware Avenue and Swift Street consist of 305 AM peak hour and 260 PM peak hour trips on Delaware Avenue. The proposed project will add 175 AM peak hour and 200 PM peak hour trips to Delaware Avenue east of Swift Street, which would increase the overall number of trips by 57 percent during the AM peak hour and 76 percent during the PM peak hour. The proposed project would result in 568 AM peak hour trips and 266 PM peak hour trips west of Swift Street on Delaware Avenue. The existing level of service of Delaware Avenue is LOS A. Although the proposed project will add a substantial number of trips to the street, the level of service would continue to operate at an acceptable LOS A, which is considered an acceptable level of service. Furthermore, the traffic analysis concluded that there would be limited traffic (less than one percent of existing traffic) traveling south on Swift Street toward West Cliff Drive. These additional trips were considerable minimal and would not cause a significant impact to Swift Street and West Cliff Drive.

7-16 Traffic and Transportation –Cumulative Impacts vs. SCCRTC Calculations

The cumulative traffic analysis for the proposed project assumed 27,000 daily trips based on 2007 data as provided by the City of Santa Cruz based on the Cumulative Projects list as identified in Table 5-1. The referenced SCCRTC traffic report, prepared in 2005, estimated 28,578 trips. This moderate difference is due in part to the fact that the data is two years older and the fact that recent traffic counts have indicated a general decrease in traffic volumes throughout the region. As such, this variation in daily trips is not considered significant.

7-17 Traffic and Transportation – Cumulative Impacts

See Response to Comments 7-11 and 7-15, above.

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

April 30, 2008

Ms. Sandy Brown, Project Planner
City of Santa Cruz
Planning & Community Development Dept.
809 Center Street, Room 206
Santa Cruz, CA 95060

Sent By Facsimile to:
(831) 588-8204.
Original Sent by First Class Mail.

SUBJECT: DEIR FOR 2120 DELAWARE MIXED-USE PROJECT

Dear Ms. Brown:

The Air District submits the following comments for your consideration:

Industrial / Commercial Uses and Sensitive Receptors

The Air District notes that the Draft EIR specified that operations might be proposed for the project that would be incompatible with sensitive receptors located in the residential areas of the project. The Air District would be glad to assist the City and Project Applicant in determining which operations and materials might pose a health risk. Lance Ericksen, Manager of the Air District's Engineering Division, should be contacted regarding these issues.

Grading of the Project Site (Twenty Acres)

Inasmuch as the Draft EIR specifies that the Project Applicant intends to grade the project site at one time, please consider the following mitigation measures to reduce impacts of fugitive dust:

- Limit grading to 8.1 acres per day, and grading and excavation to 2.2 acres per day.
- Water graded / excavated areas at least twice daily. Frequency should be based on the type of operations, soil and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations, and hydro-seed area.
- Haul trucks shall maintain at least 2'0" of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.

- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.
- Pave all roads at construction sites.

Air Quality Impact 4.1-1a

As noted above, the impacts of fugitive dust should be mitigated by requiring all trucks that haul dirt, sand or loose materials be covered. Given the coastal location of the proposed project, the coastal winds that often exceed 15 mph, and proximity of the project to people and traffic, this mitigation measure addresses health impacts and public safety. For the same reason, stockpiles should be covered and not simply watered.

The publicly posted sign should include the name of the District and its phone number, (831) 647-9411.

Air Quality Impact 4.1-1b Regarding Emissions of Diesel Exhaust and Acrolein

Heavy-duty equipment may not be able to use (due to equipment model and year, and without replacing hoses and seals) or readily locate B99 diesel fuel (due to available supply), so the Project Applicant should contact the Air District to evaluate the impacts of the equipment to be used on the project; and then apply feasible mitigation that would reduce impacts to a less than significant level. In addition, the City should require that the Air District verify that emissions would be mitigated to a less than significant level (through mitigation measures, including scheduling or equipment requirements) prior to issuance of a Notice to Proceed.

Mitigation Measure 4.1-2 Regarding Health Risk Assessments and Toxic Air Contaminants

The Air District appreciates the thoroughness of this measure.

Thank you for the opportunity to comment.

Sincerely,

Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

cc: Lance Ericksen, Engineering Division

Response to Comment Letter # 8
Monterey Bay Unified Air Pollution Control District
April 30, 2008

8-1 Air Quality – Sensitive Receptors and Health Risk Assessment

Comment is noted. Mitigation measure 4.1-2 would require that a health risk assessment is prepared for future businesses that proposed land uses which may pose a potential health risk to nearby sensitive receptors. The mitigation measure has been modified slightly to clarify that the project applicant shall consult with and submit the analysis protocol to the MBUAPCD for approval prior to undertaking the health risk assessment.

8-2 Air Quality – Mitigation Measure 4.1-1a

Comment is noted. Mitigation measure 4.1-1a would require that the project applicant implement dust control measures as part of construction activities at the project site. According to the Monterey Bay Unified Air Pollution Control District, construction projects, which emit more than 82 lbs/day of PM_{10}, would result in a significant short-term construction impact. Based on this threshold if a project would result in more than 8.1 acres per day of minimal earthmoving and 2.2 acres per day of earthmoving (grading and excavation), then the proposed project would exceed the MBUAPCD thresholds. Some of the dust control measures noted by the MBUAPCD are included in mitigation measure 4.1-1a and others are modified slightly herein. The first paragraph on page 4-20 of the Draft EIR has been modified; see Chapter 2 – Revisions to Draft EIR.

8-3 Air Quality – Mitigation Measure 4.1-1a

Comment is noted. Mitigation Measure 4.1-1a has been modified to require that the project applicant cover all exposed stockpiles due to the proximity of the ocean. This mitigation measure also requires that the phone number of the MBUAPCD is posted in a location that is visible to the public.

8-4 Air Quality – Impact 4.1-1b, Diesel Exhaust and Acrolein

Comment is noted regarding availability of B99 diesel fuel and availability of equipment year 2003 or earlier. The intent of mitigation measure 4.4-1b is to reduce particulates by proposing a diesel blend that meets or exceeds the standards outlined by CARB and the MBUAPCD. In the United States, biodiesel is the only alternative fuel to have successfully completed the Health Effects Testing requirements (Tier I and Tier II) of the Clean Air Act (1990). Biodiesel can reduce the direct tailpipe-emission of particulates, small particles of solid combustion products, on vehicles with particulate filters by as much as 20 percent compared with low-sulfur (< 50 ppm) diesel. Particulate emissions as the result of production are reduced by around 50 percent compared with fossil-sourced diesel. Biodiesel has a higher cetane rating than petrodiesel, which can improve performance and clean up emissions compared to crude petro-diesel (with cetane lower than 40). Biodiesel contains fewer aromatic hydrocarbons: benzofluoranthene: 56% reduction; Benzopyrenes: 71% reduction.

Mitigation measure 4.4-1b has been modified to require that either the project applicant use a biodiesel fuel or similar fuel that exceeds the standards outlined by CARB and the MBUAPCD to minimize emissions of diesel exhaust or utilize construction equipment in

compliance with the CARB Off-Road Diesel Engine Standards for all onsite heavy-duty equipment during construction activities. Implementation of one of these options would reduce potential impacts to a less-than-significant level. See also Comments 10-13 and 10-14.

8-5 Air Quality – Consultation with Air District

Comment regarding applicant consultation with the MBUAPCD to verify construction equipment is noted, but would not be a requirement with mitigation or under existing MBUAPCD regulations. As indicated in the DEIR and Response to Comment 8-4 above, potential impacts would be reduced to a less-than-significant level with implementation of mitigation, although the applicant is encouraged to consult with MBUAPCD staff should any clarification be required.

8-6 Air Quality – Mitigation Measure 4.1-2

Comment is noted regarding the thoroughness of Mitigation Measure 4.1-2.

SCCRTC
SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION
1523 Pacific Ave., Santa Cruz, CA 95060-3911 · (831) 460-3200 FAX (831) 460-3215 EMAIL info@sccrtc.org

April 24, 2008

Sandy Brown
City of Santa Cruz
Planning and Community Development Department
809 Center St, Room 206
Santa Cruz, CA 95060

RE: Comments on the Draft Environmental Impact Report for the 2120 Delaware Mixed Use Project

Dear Ms. Brown,

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the 2120 Delaware Mixed Use Project in the City of Santa Cruz. The Santa Cruz County Regional Transportation Commission (RTC) serves as the Regional Transportation Planning Agency for Santa Cruz County. The proposed project supports several of the Santa Cruz County *2005 Regional Transportation Plan's* (*RTP*) Goals and Policies including, but not limited to, supporting mixed-use development (*RTP* goal 3.2) and providing communities with a range of transportation options (*RTP* goal 3.3). The RTC has reviewed the document and offers the following comments:

1. The proposed project will increase traffic on nearby and regional roadway facilities. The DEIR identifies significant project impacts to Delaware/Swift, Highway 1/Bay Street and Highway 1/ Highway 9 intersections. RTC staff supports the mitigations to improve the Level of Service (LOS) at these intersections. The proposed project will also decrease LOS at the Mission Street/Almar Avenue intersection from LOS B to LOS C. RTC staff recommends the proposed project sponsor pay their fair share towards improvements required to maintain the existing LOS at the Mission Street/Almar Avenue intersection. Notably, all intersection improvements should address the needs of non-motorized travelers as well as motorized travelers (*RTP* goal 2.1).

2. The DEIR identifies significant and unavoidable cumulative traffic impacts to two intersections studied - Mission/King and Mission/Chestnut. RTC staff recommends that the City of Santa Cruz pursue opportunities to manage the demand for Single Occupancy Vehicles (SOV) on the Mission Street corridor. Improving transit service with strategies including, but not limited to, implementing elements of bus rapid transit and working with businesses located along or near the Mission Street corridor to implement transportation demand strategies that could reduce the projected cumulative impacts on this corridor.

3. The DEIR identifies significant project impacts to parking at the proposed project site. RTC staff supports the proposed mitigations to monitor and reduce demand for parking at the proposed project site.

4. The DEIR identifies less than significant impacts to Highways 1 and 17, although 43% of projected trips are expected to utilize the facilities and up to 50% of trips to and from the proposed project site are expected to utilize Mission Street. These highways, including Mission Street, currently operate below the acceptable LOS according to the *Transportation Concept Report for State Route 1* (Caltrans, April 2006) and for *State Route 17* (Caltrans, January 2006). The RTC supports the proposed mitigations to reduce the proposed project's impact on these facilities, including the recommended condition of approval which would dedicate an easement to the RTC to allow bicycle and pedestrian access from the project site to the Rail ROW. This mitigation is consistent with the RTC policy to maintain public access between residential and commercial areas and all transportation facilities, including potential future facilities, to maximize present and future opportunities for residents to utilize all modes for transportation and/or recreational purposes (*RTP* policies 2.5.3 and 3.4.5). In addition, the mitigation proposed to address parking impacts, which supports the implementation of Transportation Demand Management measures, could be expanded to promote carpooling opportunities and potentially provide some mitigation to the proposed project's impact on regional highway facilities. RTC staff recommends that the proposed project sponsor work with the Commute Solutions program to provide tenants with information about carpool opportunities.

5. RTC staff supports the proposed project's inclusion of sound proofing for the buildings closest to the Rail Line ROW in this project, especially if the building closest to the Rail Line ROW are determined to be for residential use (*RTP policy 3.4.5*).

6. The proposed project includes four access driveways. Consistent with the *RTP* policy 3.4.6, RTC staff recommends that the project site be configured to minimize the number of access points from the project site onto Delaware Avenue.

7. RTC staff supports the bike parking facilities included in the proposed project. The inclusion of bike parking facilities is consistent with *RTP* policy 3.4.4. Bike parking facilities should be located reasonably close to the building entrances. If there are multiple building entrances, then bike parking spaces should be spread-out to serve various entrances. Bike racks should also be designed with two contact points for bikes. For example, the inverted U-racks are designed to provide two contact points.

8. RTC applauds the project sponsor for their inclusion of the Transit Plaza in the proposed project. The inclusion of transit facilities in new developments supports *RTP* policies 3.4 and 5.2.3. RTC staff recommends that a cross-walk be included to connect the proposed project location to the transit stop on the south side of Delaware Avenue.

9. The project design supports pedestrian access within the proposed project and to nearby facilities, including the Rail ROW. RTC staff supports maintaining public access between

residential and commercial areas and the rail line corridor to maximize future opportunities for residents to utilize the rail line for transportation and/or recreational purposes. The proposed pedestrian facilities support the *RTP* goals and policies 3.3.1 and 5.4.13.

10. RTC staff complements the City of Santa Cruz on their efforts to pursue a greater job/ housing balance within their jurisdiction. The development of multi-use facilities is one strategy for reducing the vehicle miles traveled typically generated by separate commercial and residential developments. (The DEIR uses a trip generation reduction for the live work units of 30 percent.) RTC staff requests that the City of Santa Cruz work with the project sponsor to ensure that the housing opportunities included in the proposed development will be financially accessible to employees working in close proximity to the proposed project area. This will ensure that the project achieves the maximum reduction in vehicle miles traveled (*RTP* goal and policy 3.4 and 3.4.7).

11. The DEIR states that the Monterey Bay Sanctuary Scenic Trail (MBSST) is expected to be located to the south of the proposed project. Planning for the MBSST is expected to be initiated in 2008. At this time the trail alignment in the area near the proposed project is unknown.

12. RTC staff supports Alternative 1: Reduced Density with Modified Site Plan, as described on page 5-35, and evaluated in the DEIR. Alternative 1 achieves the *RTP* goals which support mixed-use and transit-oriented development. Although this alternative is expected to generate the greatest total number of trips as a result of its high density, the proposed project's mixed-use development design can reduce the total vehicle miles traveled typically associated with commercial and housing developments; particularly when accompanied with facilities that support transportation alternatives

13. Please correct the acronym for the Santa Cruz County Regional Transportation Commission to "SCCRTC" on the last paragraph of page 4-60 of the DEIR.

14. Please clarify what mitigation measures 4.5-2c listed on page 4-70 refers to.

Thank you for the opportunity to comment. If you have any questions about these comments, please contact Grace Blakeslee of my staff at (831) 460-3219.

Sincerely,

George Dondero
Executive Director

CC: SCCRTC
Commissioner Reilly
Commissioner Coonerty

Response to Comment Letter # 9
Santa Cruz County Regional Transportation Commission
April 24, 2008

9-1 General Statement – RTP Goals

Comment is noted that the proposed project supports several of Regional Transportation Plan goals and policies.

9-2 Traffic and Transportation – Mitigation Support

Comment is noted. The commenter supports mitigation measures 4.5-1a (Delaware Avenue/Swift Street) and mitigation measure 4.5-2a (Highway 1/Highway 9). Commenter notes that the Draft EIR identifies a significant impact to the Highway 1 (Mission Street)/Bay Street intersection. For clarification, the proposed project would not result in a significant impact to the Highway 1 (Mission Street)/Bay Street intersection under project conditions as the level of service would be LOS D under existing conditions and existing plus project (buildout), which is within the City's thresholds. Therefore no project-level mitigation is included in the Draft EIR for this intersection. However, under cumulative conditions the level of service at the Highway 1/Bay Street intersection would decrease from LOS D to LOS F during both the AM and PM peak hour. Improvements to this intersection are included in the City's Traffic Impact Fee (TIF) program. The proposed project would be required to pay the City's TIF fee, which will go toward funding improvements to this intersection. With implementation of the improvements identified in the TIF, the intersection would operate at an acceptable level of service.

9-3 Traffic and Transportation – Mission Street/Almar Avenue

The Mission Street/Almar Avenue intersection currently operates at LOS B, which is an acceptable level of service. Construction of the proposed project would decrease the LOS from B to C, which is still within the City's acceptable level of service standards. As such, no improvements have been proposed as part of the proposed project and no improvements are identified in the City's TIF program.

9-4 Traffic and Transportation – Non-Motorized Travel

Where mitigation measures have been proposed or where planned improvements are identified in the City's TIF program, the project applicant and/or the City will address the needs of alternative transportation (i.e. bike lanes, sidewalks, crosswalks, etc.) consistent with existing City standards and accepted traffic engineering design requirements.

9-5 Traffic and Transportation – Mission/King and Mission/Chestnut

Comment recommending that the City of Santa Cruz pursue opportunities to manage the demand for Single Occupancy Vehicles and transit services along Mission Street is noted and referred to City staff and decision makers for further consideration.

9-6 Traffic and Transportation – Parking MM Support

Comment is noted regarding the SCCRTC's support for the proposed project's mitigation measures 4.5-5a and 4.5-5b.

9-7 Traffic and Transportation –Pedestrian/Bike Access to the Railway Right-of-Way

Comment is noted regarding the SCCRTC's support for the recommended condition of approval that the project applicant to include an offer to dedicate an easement to the SCCRTC allowing bicycle/pedestrian access from the project site to the railway right-of-way.

See also Response to Comment 1-9.

9-8 Traffic and Transportation – Transportation Demand Management

Carpooling is a component of the City's Trip Reduction Program ordinance (see Chapter 10.46 of the Municipal Code). Comment recommending that the project applicant work with the SCCRTC as part of their Commute Solutions program to provide tenants with information about carpool opportunities is noted and is one of the many options the applicant may pursue in complying with Mitigation Measure 4.5-5b.

Per Mitigation Measure 4.5-2a, the project applicant shall be required to pay the City Traffic Impact Fee to provide the project's contribution to the planned Highway 1/Highway 9 improvement. Because the addition of project-generated trips to Highway 1 east of Morrissey Boulevard and to Highway 17 represents one percent or less of existing traffic, project-generated trips were not considered substantial in relation to existing traffic volumes and no mitigation measures were recommended.

9-9 General Statement – Building Insulation Support

Comment is noted SCCRTC's support for the proposed project's inclusion of soundproofing buildings closest to the railroad.

9-10 Traffic and Transportation – Access Driveways

As noted on page 3-11 of the Draft EIR, two of the entrances are intended to provide secondary access as service drives. The main road would provide the primary access as a looped road. Because the project is planned to be constructed in stages over time and given the circulation and parking constraints associated with the proposed project, limiting the number of driveways to less than four was not considered feasible nor consistent with the applicant's project objectives. Furthermore, limiting the number of driveways on Delaware would require significant improvements along Delaware and a major redesign of the project. Given the fact that no significant impacts along Delaware fronting the project site were identified, no mitigation measures were recommended.

9-11 Traffic and Transportation – Bike Racks

Comment regarding SCCRTC's support of bike rack for the proposed project is noted and referred to City staff and decision makers for further consideration.

9-12 Traffic and Transportation – Cross-walk to Transit Stop on Delaware

Comment regarding SCCRTC's recommendation to construct a crosswalk from the Transit Plaza across Delaware to the transit stop on the south side of the street is noted and referred to City staff and decision makers for further consideration.

9-13 Traffic and Transportation – Trails and Access

Comment is noted regarding the SCCRTC's support for the proposed project's pedestrian access design.

9-14 General Statement – Live/Work Balance

Comment regarding assuring financial accessibility of housing on the project site to people employed in proposed project's vicinity is noted and referred to City staff and decision makers for further consideration.

9-15 Traffic and Transportation – Monterey Bay Sanctuary Scenic Trail

Comment noted. The text of the FEIR has been corrected to remove reference to the alignment of the Monterey Bay Sanctuary Scenic Trail relative to the project site.

9-16 Alternatives – Alternative 1 Support

Comment regarding SCCRTC's support for Alternative 1 (which achieves *RTP* goals to support mixed-use and transit-oriented development) is noted and referred to City staff and decision makers for further consideration.

9-17 Traffic and Transportation – Correction

The EIR text has been revised to provide the correct acronym for the SCCRTC.

9-18 Traffic and Transportation – Correction

The EIR text has been revised to remove the mention of Mitigation Measure 4.5-2c, which was erroneously included in the Draft EIR. See Chapter 2 – Revisions to Draft EIR.

Private Interests

PROFESSIONAL CORPORATIONS

CASSIDY
SHIMO
DAWSON
KAWANAMI

April 30, 2008

Via Electronic Mail and U.S Mail

Department of Planning and Community Development
City of Santa Cruz
809 Center Street, Room 206
Santa Cruz, CA 95060
Attention: Sandy Brown, Contract Planner

Re: 2120 Delaware Mixed Use Project; Comments on Draft Environmental Impact Report Prepared for the City of Santa Cruz, California

Ladies and Gentlemen:

This firm represents Redtree Properties, LP ("Redtree"), in connection with the 2120 Delaware Mixed Use Project (the "Project"). The Project is comprised of Planned Development, Coastal, Design Special Use, and Watercourse Development Permits, a Development Agreement, Tentative Subdivision Map, and Sign Program, on approximately 20 acres at 2120 Delaware Street (the "Site") for mixed uses comprised of industrial and residential with a potential maximum build-out of 535, 553 square feet.

Redtree and its consultants have reviewed the March 2008 Draft Environmental Impact Report ("DEIR") prepared by RBF Consulting for the Project pursuant to the California Environmental Quality Act (Pub. Res. Code § 21000, *et seq.*) and the CEQA Guidelines (14 Cal. Code Regs. § 15000, *et seq.*; the California Environmental Quality Act and CEQA

Guidelines are hereinafter collectively referred to as "CEQA").* Based on that review, we conclude that the DEIR is legally sufficient under CEQA. Nevertheless, we submit the following comments resulting from that review in order to clarify certain aspects of the contents of the DEIR. Our comments are presented in the order in which they arise in the DEIR.

CHAPTER 2: Summary of Environmental Impacts

Page 2-1, DEIR § 2.1: The DEIR correctly describes the Project as consisting of "a Vesting Tentative Subdivision Map. . . Planned Development, Design, Coastal and Watercourse Development Permits, a Development Agreement, and a Sign Program." The Project also requires a Special Use Permit for development of multifamily units pursuant to Municipal Code § 24.10.1510(2), Cooperative Parking Facilities allowable under Municipal Code § 24.12.290.4, and for Shared Parking in accordance with Municipal Code § 24.12.290.5. Accordingly, please add these Special Use Permits to the list of required permits identified in the FEIR.

Page 2-7, DEIR § 2.4.2: As drafted, Mitigation Measure 4.4-2b proposes a mechanism to assure that necessary and appropriate maintenance would occur but which would be cumbersome to monitor and enforce in practice. This Mitigation Measure would disperse responsibility by requiring each property owner to sign a statement agreeing to be bound by water quality unit maintenance requirements through the Project Covenants, Conditions and

* We understand that the end of the period for the submission of written comments on the DEIR is April 30, 2008, public hearings for the Project will occur in June and July, 2008, and the Final Environmental Impact Report ("FEIR") will be published and considered for certification thereafter.

Restrictions ("CC&Rs"). We request that the City consider the variation set forth below for inclusion in the FEIR*:

> To ensure regular inspection and maintenance, the project's CC&Rs shall provide disclosures regarding the water quality measures that are required for the project and require that the Owner's Association inspect and maintain the water quality units in accordance with the ~~require that property owners agree in a signed statement, entitled "Maintenance Agreement," with the conditions outlined in Chapter 6 of the City's Storm Water Management Program. In addition, to ensure optimum performance of the treatment system, it shall be inspected according to~~ manufacturers specifications at minimum, to ensure that the system is operating according to City BMP standards and requirements.

For the same reasons of practicality in enforcement and for consistency, we request that the same revision be made in the FEIR to the text of Mitigation Measure 4.4-2b as set forth in Chapter 4 (*see*, DEIR p. 4-53).

Page 2-9, DEIR § 2.4.2: The DEIR's discussion of mitigation measures following the identification of Impact 4.5-5 refers to "Mitigation Measure 4.5-2c" as something that "could further help reduce parking demand." However, the DEIR does not include a Mitigation Measure 4.5-2c. Accordingly, this reference here and at page 4-70, DEIR § 4.5.3, should be corrected as appropriate in the FEIR.

CHAPTER 3: Project Description

Page 3-9, DEIR § 3.3.3: The DEIR's discussion of a Property Owners' Association states, "a 'Sub-Association' consisting of condominium owners would be created to manage the

---

* Whenever in this letter we are proposing changes to a Mitigation Measure, underlining indicates proposed language and strikeout indicates language recommended for deletion.

common interests of the buildings on that lot." To more accurately reflect the Project proposal, we recommend that the following revision be included in the FEIR:

> In addition, for each lot in the subdivision, a "Sub-Association" or Cost Center consisting of condominium owners and/or building owners within that lot will be established in the project legal documents to provide for the operation and management of the ~~would be created to manage the~~ common facilities ~~interests~~ of the buildings on that lot.

Page 3-13, DEIR § 3.3.5: The DEIR's description of lighting as an onsite improvement recognizes that the Project Design Guidelines include a "preliminary lighting plan" but posits that, "A lighting plan would be required for issuance of a Design Permit." For consistency with the DEIR discussion, please clarify the requirement in the FEIR as follows: "A final lighting plan would be required for issuance of a Design Permit." We also note that the Project Design Guidelines will be revised to require downlighting with shielding as assumed by the DEIR discussion. Please also refer to the discussion below with respect to DEIR pages 3-15 and 3-17, DEIR § 3.3.7, with respect to the design review process under Development Agreement Section 3.4.2.

Pages 3-15 and 3-17, DEIR § 3.3.7: The DEIR's discussion of Design Permits states (p. 3-15) that, "Any future buildings that deviate from the approved design would be required to obtain an Administrative Design Permit and be in accordance with the Design Guidelines developed for the project." Its discussion of "Future Site Development Permits" states (p. 3-17), "Development that is not in substantial conformance with the approved plans and Design Guidelines would require approval of an Administrative Design Permit and would be subject to the Design Guidelines for the project." These statements do not conform with

Development Agreement Section 3.4.2, which the City and Redtree agree would govern the "Design Review Process for Subdivision Parcels Other Than Initial Development". We recommend that relevant discussion in DEIR § 3.3.7 be revised in the FEIR to reflect accurately the procedures specified in Development Agreement § 3.4.2.

Page 3-16, DEIR § 3.3.7: This discussion of Special Use Permits identifies multifamily residential and Cooperative Parking Facilities as triggering the City's Special Use Permit requirement, but fails to acknowledge (and subsequent analysis apparently fails to consider) the Shared Parking proposed as part of the Project as an independent trigger for Special Use Permit approval. Accordingly, (i) this discussion of the Project applications for required permits and approvals and discretionary actions should be revised in the FEIR to include Shared Parking under Municipal Code § 24.12.290.5, and (ii) the analysis of parking in DEIR Chapter 4.5 should be supplemented in the FEIR to reflect the Shared Parking standards.

Pages 3-19—3-23, DEIR § 3.4.1: This portion of the DEIR discusses "Existing General Plan and Zoning Designations." The CEQA Guidelines (§ 15125(d)) specify that an EIR must discuss any "inconsistencies between the proposed project and applicable general plans and regional plans." The required CEQA analysis does not include compliance with zoning designations and, thus, this portion of the DEIR on compliance with the requirements for a Planned Development under the City's Zoning Ordinance should be deleted in the FEIR. It should instead be analyzed by Staff as part of the review of the merits of the Project during the land use approval process for the Project approvals. Redtree will provide separately information on its views of the Project's compliance with applicable City Ordinances and policies as part of the land use approval process for the Project.

Pages 3-23—3-24, DEIR § 3.4.3: This discussion in the DEIR (referencing § 4.8 of the DEIR) notes that, along the northern segment of the Project, edges of one building and pavement area slightly encroach into the development setback and an unidentified area adjacent to the west of Building 26. This is identified as a significant adverse but mitigatable impact in Impact 4.8-1 of the DEIR (pp.4-108—4-109). Redtree has agreed to modify the Project site plan to eliminate this encroachment, and as a voluntarily adopted Mitigation Measure, thereby eliminates any purported adverse impacts of this encroachment (*see*, CEQA Guidelines § 15126.4(a)(1)(A)). The relevant portions of the FEIR should modify the discussion of this issue to note that no adverse impact will occur to biological resources as a result of the incorporation by Redtree of the proposed modifications into the Project site plan.

Page 3-19—3-24, 3-27, DEIR Table 3-5: The discussion in the DEIR of General Plan consistency and Table 3-5 in the DEIR notes that the Project is consistent with the relevant policies of the City's 2005 General Plan. As noted above, however, the CEQA Guidelines require that the DEIR discuss "inconsistencies" between the Project and applicable General Plan policies, not "consistencies" (CEQA Guidelines § 15125(d)). In fact, based on the examination by Redtree and its consultants of the applicable policies in the 2005 General Plan, the Project is consistent with all relevant 2005 General Plan policies and provides substantial public benefits pursuant to those policies which identify contributions projects can make to the City by meeting relevant General Plan policies. In addition, we note that the City Council adopted the City's 2030 General Plan Goals on June 26, 2007, and that the Project is consistent with the relevant Goals adopted by the City Council, again providing significant public benefits pursuant to those policies. The FEIR should affirm that the Project is not

inconsistent with the 2005 General Plan or the adopted City 2030 General Plan Goals. We believe that this latter analysis is useful because, even though the 2005 General Plan will govern the land use approvals for the Project, the Planning Commission is scheduled to consider the 2030 General Plan at its May 8, 2008, meeting and the City anticipates that this updated "constitution" for the City's development will be adopted in the months following Planning Commission approval.

CHAPTER 4: Environmental Setting, Impacts and Mitigation Measures

Pages 4-1—4-111, DEIR chapter 4: As the DEIR properly observes, the analysis of potential adverse impacts utilizes a "worst case" scenario based on a mix of uses which would produce maximum impacts for each subject analyzed in the DEIR. In turn, each of the Mitigation Measures recommended by the DEIR reflects this worst case analysis. In fact, as also acknowledged by the DEIR, the actual mix of uses on build-out of the Project will likely be something "in between" the most intense uses. (*See, e.g.*, pp. 2-1, 4-10, 4-61.) Accordingly, implementation of each Mitigation Measure over time as the Project is built out should reflect the actual uses developed in the Project and correlate those uses to the appropriate level of mitigation suggested by the applicable Mitigation Measure. In this manner, the Mitigation Measures will be calibrated to actual impacts rather than dominated by the worst case scenarios utilized by the DEIR, particularly for traffic and parking.

Page 4-15, DEIR § 4.1.4:

Comment 1: To mitigate potential short-term, construction-related impacts from heavy-duty equipment diesel exhaust and acrolein emissions, Mitigation Measure 4.4-1b states:

> The proposed project shall require that heavy-duty equipment use biodiesel fuel (B99 blend) or similar fuel to minimize emissions of diesel exhaust on all onsite equipment used during grading activities. [and]
>
> The project applicant shall be required to use 2003 or later models for all onsite heavy-duty equipment used during grading activities or install oxidation catalysts on heavy-duty equipment.

The DEIR states that Mitigation Measure 4.4-1b was drafted in "accordance with the recommendations of the [Monterey Bay Unified Air Pollution Control District]." In the view of Redtree's consultant, Justice & Associates Environmental Consultants, the recommendation to use the B99 blend of biodiesel fuel is problematic, since it may not be available locally in amounts required for the Project and because it could increase nitrogen oxide emissions even while reducing emissions of diesel particulate matter and organic compounds. The California Air Resources Board ("ARB") issued a draft advisory on biodiesel use on November 14, 2006, which is attached as Exhibit 1. This advisory recommends (p. 3) that specified conditions apply if biodiesel blends are used in on- and off-road diesel vehicles, including that the characteristics of the biodiesel fuel conform to the following:

- The biodiesel portion of the blend complies with the American Society for Testing and Materials (ASTM) specification D6751 applicable for 15 ppm sulfur content,
- The diesel fuel portion of the blend complies with Title 13, California Code of Regulations (CCR), sections 2281 and 2282 (diesel regulations); and
- The resulting biodiesel blend contains no more than 20 percent biodiesel by volume.

Accordingly, we request that the FEIR clarify that the City intended its use of the phrase "or similar fuel" in Mitigation Measure 4.4-1b to mean a fuel or fuel blend, the use of which would reduce emissions of diesel particulate matter and organic compounds without increasing nitrogen oxide emissions.

Comment 2: With respect to the requirement to use 2003 or later models for all onsite heavy-duty equipment used during grading activities, Redtree's consultant notes that off-road diesel engine standards issued by the ARB and United States Environmental Protection Agency provide comparable emissions reductions for engines from other model years. A table illustrating the relationships is attached as Exhibit 2. Consistent with the emissions reductions that would result from implementation of the second requirement of Mitigation Measure 4.4-1b, the FEIR should allow the use of the following:

- For engines between 25 and 50 horsepower, engines manufactured as early as 1999 were required to meet the same standards as engines in this horsepower range manufactured in 2003. Accordingly, the use of engines within this horsepower range that were manufactured during or after 1999 also should be allowed.
- For engines between 50 and 100 horsepower, engines manufactured as early as 1998 were required to meet the same standards as engines in this horsepower range manufactured in 2003. Accordingly, the use of engines within this horsepower range that were manufactured during or after 1998 also should be allowed.
- For engines between 300 and 600 horsepower, engines manufactured as early as 2001 were required to meet the same standards as engines in this horsepower range manufactured in 2003. Accordingly, the use of engines within this horsepower range that were manufactured during or after 2001 also should be allowed.
- For engines between 600 and 750 horsepower, engines manufactured in 2002 were required to meet the same standards as engines in this horsepower range manufactured in 2003. Accordingly, the use of engines within this horsepower range that were manufactured during or after 2002 also should be allowed.

Page 4-20, DEIR § 4.1.4: Implementation of Air Quality Mitigation Measure 4.1-2 would reduce impacts to a less than significant level. However, the quantitative/qualitative/objective standards for determining if risks are "unacceptable" are not specified. Please include a quantitative/qualitative/objective standard in the FEIR for making such a determination.

Page 4-23, DEIR § 4.2.2: The DEIR's discussion of the California Building Code states, "The current building code is based on the International Code Council (ICC) model codes that were approved by the State and became effective on January 1, 2008. The new code includes a new kind of soils identification and analysis system, and a new project soils report will be required to verify compliance." Redtree's geotechnical consultant, United Soil Engineering, Inc., has analyzed Project soils pursuant to the new (January 2008) Code and concludes that there is no change in the recommendations. (*See*, letter setting forth United Soil Engineering's analysis and conclusions, attached as Exhibit 3.) Accordingly, (i) the FEIR should reflect the updated analysis and recommendations, and (ii) Mitigation Measure 4.2-1a (DEIR, p.4-27) should be deleted as no longer necessary.

Page 4-25, DEIR § 4.2.4: Impact 4.2-1 states that high groundwater conditions pose a constraint to development. The discussion refers to the geotechnical report recommendations regarding dewatering and lowering of ground water levels. United Soil Engineering has reviewed these recommendations and concurs that the methodology described is a mitigation for the perched groundwater condition at the Site. However, United Soil Engineering has concluded that a series of subdrains is not required; rather, a curtain drain system constructed at the northern property boundary line and, if recommended by the Project's civil engineer, at the middle of the Site to an approximate depth of ten (10) feet below the existing ground

surface would adequately intercept subsurface seepage water before it enters the Site and discharge the water to the existing drainage channel along the western property boundary line. In addition, United Soil Engineering has concluded that this system would relieve some of the perched groundwater conditions at the Site prior to mass grading and thus no dewatering will be required during construction. (*See*, letter attached as Exhibit 3.)The FEIR should include these alternative methodologies.

Page 4-48, DEIR § 4.4.4: Table 4.4-1 (*Estimated Pre- and Post-Project Runoff (10-Year Storm Event)*) identifies the "Net Change (cfs)" for the Site during Years 1-8 as +12.54, which is mathematically incorrect. The FEIR should report the correct result, which is +15.54.

Page 4-53, DEIR § 4.4.4: Because high water levels in Arroyo Seco during a large storm event could impede the proper functioning of water quality units that are proposed to be installed as part of the Project and, thereby, could result in potential water quality degradation, Mitigation Measure 4.4-2d would require Redtree to use "pervious pavement and pavers to the maximum extent possible."

Comment 1: Mitigation Measure 4.4-2d incorrectly characterizes the applicable standard, *i.e.*, MEP. The abbreviation "MEP" stands for "Maximum Extent *Practicable*" as correctly cited on pages 3-18 and 4-42 of the DEIR. This correction should also be made on pages 2-8 (DEIR § 2.4.2), 3-26 (Table 3-5), and 3-29 (*id.*).

Comment 2: The use of pervious pavement and pavers may be limited on the Site due to ground water and soils. As correctly noted on pages 4-42 and 5-37 of the DEIR, pervious pavement and pavers are only one of several Low Impact Development ("LID") design

techniques that are available to meet the standard. As proposed, the Project will incorporate LID measures for stormwater management to the Most Extent Practicable (MEP) based on review by Redtree's consultant, Bowman & Williams Civil Engineers. The location, type, and extent of the measures will be determined during the final design process and will be subject to review by City agencies. The FEIR should be revised to reflect the foregoing concepts. This same comment applies to the DEIR's analysis of Alternative 1 (p. 4-40, DEIR § 5.6.2).

Comment 3: As noted by Redtree's consultant, the storm drain outfalls, as designed and proposed as part of the Project, will discharge to a redeveloped drainage channel that consists of rock, grasses and willows. This channel will provide additional cleansing of the storm water effluent prior to its discharge to the Pacific Ocean. Discussion and analysis in the FEIR should reflect this information.

Page 4-62, DEIR § 4.5.2: The DEIR's description of relevant Project characteristics discusses the new trail to be developed along the Arroyo Seco riparian corridor at the Site's western edge that would extend from the existing sidewalk along Delaware Avenue on the Site's southern edge toward the Union Pacific Railroad right-of-way on its northern edge. Because it is not clear from the DEIR discussion who will be responsible for completing the trail connection, it should be clarified in the FEIR that (i) Redtree will be responsible for connecting the sidewalk to the trail, which dead-ends at that point, and (ii) Redtree will not be responsible for any future connection of the trail to the Union Pacific Railroad right-of-way.

Page 4-63, DEIR § 4.5.3: The DEIR's discussion of parking requirements does not take into account Shared Parking allowed by Municipal Code § 24.12.290.5. Application of the Shared

Parking provisions of the Municipal Code would further reduce parking demand reflective of the mixed uses at the Project and their interaction during the day affecting parking demand. Discussion and analysis provided in the FEIR should analyze overall Project parking demand based on application of the Shared Parking provisions.

Page 4-65, DEIR § 4.5.3: Mitigation Measure 4.5-1a recommends that Redtree be assessed its "fair share cost" toward the signalization and restriping of the Swift Street/Delaware Street intersection or the construction of a roundabout. For purposes of implementing this mitigation measure, how will "fair share" be determined? As discussed in CEQA Guidelines Section 15126.4(a)(4), mitigation measures must have an essential nexus and be "roughly proportional" to the impact mitigated. Based on this standard, we believe that "fair share" should be based on an objective quantitative analysis of the proportional contribution of the Project at build-out to the impact versus the contribution of other projects to the impact. The FEIR should reflect these concepts.

Page 4-66, DEIR § 4.5.3: Mitigation Measure 4.5-2a recommends that Redtree be assessed the City's Traffic Impact Fee "at the time of issuance of building permits." The FEIR should clarify that such fee is to be paid (i) on a building permit-by-building permit basis *at the time each building permit is issued* and (ii) in an amount determined by using the Project trip generation calculated *for the use for which the building permit is issued.* The FEIR also should clarify that implementation of Mitigation Measure 4.5-2 would result in an LOS meeting Caltrans' standards.

Page 4-68, DEIR § 4.5.3: Regarding bicycle and pedestrian circulation, the DEIR mentions the Santa Cruz County Regional Transportation Commission's recommendation that the

Project "include access to and from the property on its northerly boundary to the existing rail line [right-of-way]." As noted above, the FEIR should be clear that, although the Project design provides an opportunity for a connection, any future connection of the new Arroyo Seco trail to the Union Pacific Railroad right-of-way is not Redtree's responsibility.

Page 4-71, FEIR § 4.5.3:

Comment 1: Mitigation Measure 4.5-5a recommends that Redtree submit a revised site plan for the entire Site in advance of Vesting Tentative Map approval that "provides sufficient on-site parking using the worst-case parking requirements as defined in the EIR, *i.e. a minimum of 1,150 on-site parking spaces*" (emphasis added). First, the number of required "worst case" spaces should be revised as appropriate in the FEIR to reflect a revised parking analysis that considers the Shared Parking standards in the Municipal Code. Second, because the timing and sequence of build-out of the Project cannot be predicted over time, this Mitigation Measure should allow for the submission of alternative site plans showing potentially different solutions to any parking shortfall, should allow for substitution of lots designated on alternative site plans for parking use with other lots within the Project when the determination on different parking requirements is made pursuant to this Mitigation Measure, and should take into account any then-available off-site parking facilities which could meet parking shortfalls.

Comment 2: Implementation of Mitigation Measure 4.5-5a also would require Redtree to pay for an independent parking study "[f]ollowing the permitted construction of 260,000 square feet of development, . . . to analyze actual parking conditions associated with the Years 1-7 building program and to identify a parking generation rate for this type of mixed-use project."

Mitigation Measure 4.5-5a then states (with emphasis added), "Should this parking study determine that different parking requirements are warranted based on the mixed-use characteristics of the project, the City's Planning Director and Public Works Director *may, at their option*, revise the parking requirements for the proposed project and accept from the applicant a modified site plan that is consistent with these revised parking requirements." First, the parking study should be based on the same standards (including City Ordinances vested under the Development Agreement) utilized by the DEIR to analyze Project parking demand and should analyze project parking demand based on the actual uses in the permitted 260,000 square feet of development, as well as projected uses based on reasonable market forecasts for build-out of the Project. Second, Redtree's traffic and parking consultant, Parisi Associates, has analyzed the worst case scenario utilized by the DEIR for Mitigation Measure 4.5-5a and has concluded that (i) it is highly probable that parking demand will be less than projected because the ultimate mix of uses at the Project will not be the worst case scenario (a point as discussed above that is noted and acknowledged by the DEIR), and (ii) the evaluation of parking demand as set forth under *Comment 1* above would indicate a reduced demand for parking. For these reasons, in the FEIR, Mitigation Measure 4.5-5a should be revised to *require* the Planning and Public Works Directors to revise the parking requirements if and when warranted by the independent study. Third, as planners and environmental consultants will readily acknowledge (and, as a topic currently under discussion in the City), requiring parking beyond actual project needs has a highly negative environmental impact associated with that excess parking, including traffic and air quality impacts. Finally, this Mitigation Measure and the foregoing comments are an example of the reasons why Project Mitigation

Measures should be implemented on a calibrated basis to reflect actual uses developed in the Property, as discussed above in the first comment under Chapter 4 of the DEIR.

Comment 3: The FEIR should incorporate conforming changes as appropriate. *See, e.g.*, DEIR, p. 2-9 (quoting Mitigation Measure 4.5-5a).

Pages 4-89 through 4-90 and 4-96, DEIR § 4.6.3: CEQA requires an analysis of cumulative impacts only where possible project-specific impacts may be cumulatively considerable, *i.e.*, when the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. *See, e.g.*, 14 Cal. Code Regs. § 15130. A "cumulative impact consists of an impact which is created *as a result of the combination of the project evaluated in the EIR* together with other projects causing related impacts." 14 Cal. Code Regs. §§ 15130, 15355 (emphasis added). Thus, CEQA requires a lead agency to analyze incremental, project-specific impacts before it will have the baseline information necessary to analyze cumulative effects. As reflected in the DEIR discussion on water supply impacts and in Mitigation Measure 4.6-3a, the DEIR appears to conflate inappropriately the required project-specific analysis with the cumulative analysis. Utilizing the baseline for water supply described in the DEIR, it is clear that the Project-specific impacts on water supply will be insignificant. As noted in the DEIR discussion, the worst case water demand caused by the Project would amount to 7% of the City's excess water supply in normal years (and, if analyzed in accordance with the standards used for the La Bahia project and Tannery Arts Center project discussed below, 5%), and the Project water demand could also be accommodated in drought years. The Development Agreement will allocate and vest the

Project's entitlement to this portion of the City's excess water supply, ensuring that no adverse impacts will occur (and we note that this applies to the cumulative scenario, as discussed below).

The FEIR should include an analysis of incremental, Project–specific impacts on water supply reflective of the foregoing points. In conducting this analysis, the City should apply the same methodology to the Project that it used in the Draft EIR recirculated for the La Bahia project and in the Final EIR for the Tannery Arts Center project. *See, e.g.*, La Bahia Revised Draft EIR (April 2008), pp. 4-12—4-14 (incremental impacts), pp. 5-29, 5-26 (cumulative impacts); Tannery Arts Center Final EIR (April 2005), pp. 11-3 and 11-4 (incremental impacts) and pp. 12-12—12-14 (cumulative impacts). Applying this methodology (a Comparison of Project Water Demand Estimates for the Delaware Addition is attached as Exhibit 4), the Project is expected to use a maximum of 15.04 rather than 20.72 million gallons per year ("MG/YR"), which represents 5% not 7%, of the City's available water supply as a worst case scenario. Under either methodology, the analysis results in a conservative figure, and the Project at build-out will use less water than the amount allocated to it for purposes of analyzing even the very worst case scenario. This result is also ensured by the vesting of water supply for the Project pursuant to the Development Agreement. After the analysis has been revised, conforming changes should be made as appropriate throughout the FEIR. *See, e.g.*, DEIR p. 5-24 ("The project's contribution would be approximately 7 percent of total cumulative demand.").

Pages 4-96, DEIR § 4.6.3: As noted above, a proper CEQA analysis of Project level impacts on available water supply clearly leads to the conclusion that the Project will have adequate

water supplies under all scenarios. Accordingly, Mitigation Measure 4.6-3a is inapposite. Instead, the DEIR should, consistent with other recent City EIR analyses, conclude that the Project will have no significant adverse impacts on water supply. Accordingly, Mitigation Measure 4.6-3a should be deleted. Redtree has committed to incorporating in the Project the water-conserving measures set forth in Mitigation Measure 4.6-3b. (CEQA Guidelines § 15126.4(a)(1)(A).) As noted below, the "Conclusion" for the water analysis in the cumulative scenario should specify in the FEIR that Redtree will pay the "System Development Charge" as its fair share contribution to the costs of implementing water conservation programs and the planned desalination plant, to which the System Development Charge contributes.

Page 4-110, DEIR § 4.8.3: Mitigation Measure 4.8-2b would require Redtree to implement erosion control measures, including limiting grading work to periods outside the rainy season. Mitigation Measure 4.8-2b should be revised in the FEIR so that grading is allowed (as is customary) to occur during the rainy season, provided that a winter grading permit is obtained and appropriate erosion control measures are in place.

CHAPTER 5: CEQA Considerations

Pages 5-3 through 5-5-31, DEIR § 5.3: As a general comment, the DEIR's analysis of cumulative impacts on each of the relevant CEQA analyses should include in the FEIR a discussion of Mitigation Measures that are proposed to reduce the *Project's* contribution to cumulative impacts to a less-than-significant level (CEQA Guidelines § 15130(b)(5)). If an impact is significant and unavoidable, the "Conclusion" should so state, leading to the requirement for a statement of overriding considerations (CEQA Guidelines §§ 15091(a)(3), 15092(b)(2)(B), 15093(b)). Based on our review of the DEIR, subject to the comment below

discussing the "project"-based cumulative analysis, the only significant unavoidable cumulative impacts are traffic at the Mission Street/King Street and Mission Street/Chestnut Street intersections. The Project will not contribute to significant unavoidable impacts for water supply for the reasons discussed above.

Page 5-4, *et seq.* (Table 5-1), DEIR § 5.3.2: The DEIR analyzes cumulative impacts pursuant to a list-based approach (*see*, Table 5-1) (CEQA Guidelines § 15130(b)(1)(A)). We note that the list includes projects which are relocations (*e.g.*, 425 Encinal and Kirby school) or replacements of existing uses (*e.g.*, Ocean Street Hotel, Tannery Arts, 706-708 Frederick and others) and, in either case, are not "new" projects. Accordingly, these projects are part of the baseline against which project-specific impacts are measured (CEQA Guidelines § 15125(a)) and should not be included in the cumulative scenario; otherwise, the cumulative analysis will "double count" impacts of listed projects in both the baseline and cumulative scenarios, including traffic and water supply.

The City of Santa Cruz is almost entirely built-out and the cumulative analysis does not appear to account for the fact that many of these "future" or "pending" projects are replacement projects for existing uses. Such projects would have a CEQA impact only if the replacement project creates different or more intensive impacts than the existing ones they are replacing.

Page 5-19 through 5-24, DEIR § 5.3.3: For the reasons discussed above, sufficient water supplies are available to serve the Project both at the Project level and in the cumulative scenario. The less-than-significant Project-specific impact on water supply would not be cumulatively considerable. Relevant discussion in the FEIR should be revised accordingly.

Page 5-37, DEIR § 5.6.2: Please see discussion above regarding implementation of LID measures for the Project and revise this portion of the Alternatives discussion accordingly.

Page 5-44, DEIR § 5.7.2: The DEIR's discussion of transportation and traffic-related impacts of Alternative 2 assumed "a development scenario of all industrial development. . . with no residential units or retail uses" but then states that reductions for internal trips and work/live unit trips would "remain the same [*sic*] those used for the proposed project." This obviously understates the traffic and parking generation for this Alternative. The FEIR should revise this discussion to reflect these facts.

Page 5-47, DEIR § 5.7.3: The DEIR indicates that implementation of Alternative 2 would meet at least five of the Project Objectives. It is entirely unclear how the principal uses described on Page 5-42 in DEIR § 5.7.1 correlate to the Project Objectives which the DEIR asserts this Alternative would meet. Because it is not clear how this Alternative meets these Objectives, this discussion should be revised or supplemented to justify this conclusion in the FEIR.

Pages 5-48 and 5-49, *et seq.*, DEIR §§ 5.8.1, 5.8.2: In connection with Alternative 3 (*Buildout Under Existing Zoning Requirements with No Planned Development*), the DEIR states at page 5-48 that "this alternative would allow for a total of 118 residential units (as compared to between 161 and 248 for the proposed project)." Next on pages 5-48—5-49, the DEIR states that, "Furthermore, because this alternative would not include any residential housing, the number of daily vehicle trips . . . would be reduced . . . ." Finally, under "Transportation and Traffic" on page 5-49, the DEIR says that 118 residential units were assumed and reductions for internal trips and work/live units were included in the traffic

calculations. First, the discussion is inconsistent and should therefore be revised to reflect the correct assumption regarding residential units. Second, the analysis should be revised to reflect the fact that the residential units would not include flex spaces/work/live units or retail and thus reductions for internal trips and work/live unit trips is inappropriate. Obviously, without these trip reduction factors, residents and employees under this Alternative would be required to go off-site in order to go to work and meet daily needs (*see, also*, Table 5-12, citing "Residential: Work/Live Townhouses/Flex Units, Work/Live Reduction, and Internal Trip Reduction" all inaccurate under this Alternative, and Table 5-13 regarding reductions for parking, also inaccurate). The additional incremental traffic that would result from the necessity for these extra trips under this Alternative should be analyzed.

Page 5-53, DEIR § 5.8.3: The DEIR indicates that implementation of Alternative 3 would meet at least 6 of the Project Objectives. It is entirely unclear how the uses described for this Alternative (pp. 5-47—5-48, DEIR § 5.8.1). correlate to the Project Objectives which the DEIR asserts this Alternative would meet. Because it is not clear how the Alternative meets these Objectives, this discussion should be revised or supplemented to justify this conclusion in the FEIR.

Thank you for considering Redtree's comments on the DEIR. If you have any questions about these comments or you need additional information or analysis of the basis for the comments, please do not hesitate to contact Mr. Craig French (telephone: (831) 427-1900; email: craig@redtreeproperties.com) of Redtree, or counsel for Redtree, Ms. Charlene B. Atack of Bosso, Williams (telephone: (831) 426-8484; email: Catack@bossowilliams.com), or Mr. Stephen K. Cassidy (telephone: (415) 788-2040; email: skc@csdklaw.com) or Ms.

Janna Scott (telephone: (415) 788-2040; email: jas@csdklaw.com) of Cassidy, Shimko, Dawson & Kawakami.

Very truly yours,

CASSIDY, SHIMKO, DAWSON & KAWAKAMI

By: _____
Stephen K. Cassidy
Attorneys for Redtree Properties, L.P.

Cc: Charlene B. Atack
Doug Ley, Redtree Properties, LP
Craig French, Redtree Properties, LP

AIR RESOURCES BOARD
DRAFT ADVISORY ON BIODIESEL USE
Revised 11/14/06

Purpose

The purpose of the advisory is to clarify the use of biodiesel with respect to existing Air Resources Board (ARB) regulations and to provide guidance on the voluntary use of biodiesel. It is not the intent of this advisory to address issues related to emissions, health risk assessment methodology, or the need to assess possible multimedia impacts that may result from the use of biodiesel. These issues will be addressed based on information obtained from a biodiesel research study that will be sponsored by the ARB and other information.

Background

A summary of enacted Senate Bill 975 and ARB and the Department of Food and Agriculture, Division of Measurement Standards (DMS) regulations is provided to describe the regulatory framework that may limit the use of biodiesel in California.

Senate Bill 975: Senate Bill 975 enacted new provisions in the California Health and Safety Code, Division 26, Part 5, Chapter 4, Article 6, Section 43860 that allow the use of biodiesel in retrofitted fleet vehicles. Specifically, any federal, state, or local agency, or any regulated utility, or any owner or operator of a solid waste collection vehicle or collection vehicle, as defined in Section 2021 of Title 13 of the California Code of Regulations, may utilize a biodiesel blend fuel consisting of not more than 20 percent biodiesel in any retrofitted vehicular or off-road diesel engine certified by the state board, whether or not biodiesel is expressly identified as a fuel for use with the retrofit system. Biodiesel is required to meet the American Society for Testing and Materials (ASTM) D-6751 specification and any diesel that the biodiesel is blended into must meet applicable fuel specifications for California diesel fuel. The provisions of Article 6 remain in effect until January 1, 2008.

The effect of Article 6 is to allow the voluntary use of biodiesel blends up to 20 percent in vehicles and engines with retrofit devices that have been verified as in-use strategies using California diesel fuel under Title 13, California Code of Regulations (CCR), sections 2700 through 2710.

ARB Regulations

California diesel fuel regulations, Title 13, CCR, Sections 2281 and 2282: These regulations define "diesel fuel" to mean any fuel that is commonly or commercially known, sold or represented as diesel fuel, including any mixture of primarily liquid hydrocarbons – organic compounds consisting exclusively of the elements carbon and hydrogen – that is sold or represented as suitable for use in an internal combustion,

compression-ignition engine. This allows other organic compounds such as biodiesel to be used up to 49 percent by volume.

These regulations require diesel fuel to contain no more than 15 parts per million (ppm) sulfur and 10 percent aromatics. These regulations also allow for diesel fuels with an aromatic content higher than 10 percent to be produced as long as the fuels have been demonstrated to have equivalent emissions as a 10 percent aromatic fuel. These fuels are certified diesel fuel formulations and production is limited to the fuel specifications that are contained in individual Executive Orders (EO) issued by the ARB. Certified diesel fuel formulations generally meet American Society for Testing and Materials (ASTM) D975 fuel specifications.

As previously mentioned, under ARB's diesel fuel regulations, biodiesel blends of less than 50 percent (B50) are defined as meeting the definition of diesel. Therefore, biodiesel blends of less than B50 must comply with the sulfur and aromatic specifications of the regulations. Biodiesel blends of B50 or greater are not defined as diesel fuel and the diesel regulations do not apply to these blends. Note that when using biodiesel as a blend stock to produce complying California diesel fuel, the finished diesel fuel must meet the applicable specifications under Title 13, CCR, sections 2281 and 2282 and, as applicable, any Executive Order issued for a certified diesel fuel formulation.

Airborne Toxic Control Measures (ATCMs): The Board has adopted a number of ATCMs to control diesel particulate matter (PM). This includes measures for portable and stationary engines, transportation refrigeration units, transit buses, solid waste collection vehicles, and cargo handling equipment. Additional measures for on-road trucks, off-road vehicles, and commercial harbor craft are under development. Diesel fuels used under these ATCMs must meet the requirements of CARB diesel fuel regulations 2281-2285 and ASTM D975. As currently written, several of these regulations allow the use of alternative diesel fuels[1] if these fuels are verified under Title 13, CCR, sections 2700 through 2710 as described below. The main purpose for requiring verification is to ensure that alternative diesel fuels are reviewed under a multi-media evaluation.

Title 13, CCR, sections 2700 through 2710, "In-use strategies verification procedure," was adopted to verify strategies that reduce diesel PM emissions. In-use strategies such as particulate filters must be verified using California diesel fuel containing 15 ppm sulfur or less unless otherwise specified by the applicant.

[1] Alternative Diesel Fuel means any fuel used in diesel engines that is not a reformulated diesel fuel as defined in Sections 2281 and 2282 of Title 13, of the California Code of Regulations, and does not require engine or fuel system modifications for the engine to operate, although minor modifications (e.g. recalibration of the engine fuel control) may enhance performance. Ref. Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines Title 13, California Code of Regulations, section 2701(a)(2).

Division of Measurement Standards Regulations: Division of Measurement Standards (DMS) has adopted regulations that apply to the retail marketing of biodiesel. Title 4 CCR, Division 9, section 4147, requires biodiesel blending stocks meet ASTM 6751 specifications and finished biodiesel fuel blends meet ASTM D975. However, finished biodiesel blends not meeting section 4147 can be sold under a developmental engine fuel variance. A developmental engine fuel means any experimental automotive spark-ignition engine fuel or compression-ignition fuel that does not meet current standards but has characteristics that may lead to an improved fuel standard or the development of an alternative fuel standard.

Finally, DMS regulations under Title 4, Division 9, section 4148 specifies labeling and price advertising sign requirements for biodiesel sold in commerce.

Additional information on these regulations can be obtained from Mr. David Lazier, Chief, Weighmaster, Petroleum Products Branch of DMS at (916) 229-3044.

Use of Biodiesel

The Air Resources Board (ARB) staff recommends that if biodiesel blends are used in on- and off-road diesel vehicles, portable engines, and stationary engines, the following conditions should apply.

- Biodiesel fuel characteristics:
    - The biodiesel portion of the blend complies with the American Society for Testing and Materials (ASTM) specification D6751 applicable for 15 ppm sulfur content,
    - The diesel fuel portion of the blend complies with Title 13, California Code of Regulations (CCR), sections 2281 and 2282 (diesel regulations); and
    - The resulting biodiesel blend contains no more than 20 percent biodiesel by volume.
- Vehicles retrofitted with verified devices under Title 13, CCR, sections 2700 through 2710 can use biodiesel blends up to 20 percent, so long as the retrofit method employed on the engine was verified based on the use of commercial diesel fuel meeting CCR, sections 2281 and 2282 and for the purpose of reducing diesel particulates only, but not verified devices for both diesel particulate and oxides of nitrogen. As discussed above, biodiesel blends must meet other applicable state requirements.
-
    - Users of biodiesel blends should determine if the use of biodiesel blends up to 20 percent will affect their engine warranties and are advised to avoid use of fuel that would negate a warranty.
    - ARB will pursue modifications to update the warranty provisions that applied to verified devices under the original Executive Order with device manufacturers.

Use of biodiesel blends is generally expected to reduce diesel particulate matter and organic compounds; however, nitrogen oxide emissions may increase. These effects tend to increase as the percent of biodiesel in the fuel increases.

Use of blends of no more than 20 percent biodiesel is expected to enable expanded use of an alternative renewable fuel. However, with the prospect of widespread use of biodiesel the ARB is beginning to develop the technical information to support setting specifications to ensure that the emissions benefits of California diesel fuel are retained.

Other Information

Summarized below is information for consideration when using biodiesel.

- The biodiesel portion of the blend meeting ASTM D 6751 should contain less than 10 percent aromatics and have a cetane number of 53 or above.
- Use of biodiesel blends greater than 20 percent and B100 are not recommended at this time.
- The Engine Manufacturers Association (EMA) has recently published draft test specifications for biodiesel. These draft specifications are intended to result in a biodiesel blend fuel with consistent properties. The draft specifications recommend limiting biodiesel blends to 20 percent or less and contain recommended performance requirements. EMA encourages fuel users to obtain biodiesel from sources known to produce quality fuels that meet these specifications. EMA's draft test fuel specifications for biodiesel can be accessed at the following: http://www.enginemanufacturers.org/admin/library/upload/924.pdf

Next Steps

Staff intends to address other issues as described below.

- Conduct a biodiesel research study to:
  - Assess emissions impacts (criteria, toxic pollutants, and greenhouse gas emissions) from the use of biodiesel including sources of biodiesel;
  - Assess effects of biodiesel blends; and
  - Assess effects of test protocols (chassis and engine dynamometers tests) on emissions.
- Evaluate the need to develop biodiesel fuel specifications to preserve the benefits of California diesel.
- Conduct a multimedia evaluation if necessary
- Evaluate the need to develop recommendations on biodiesel specifications to address issues other than those related to air pollution.

Table 1. ARB and USEPA Off-Road Compression-Ignition (Diesel) Engine Standards (NMHC+NOx/CO/PM in g/bhp-hr). When ARB and USEPA standards differ, the standards shown here represent the more stringent of the two.

Maximum horsepower	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
<11	See Table 2 footnote (a)					7.8 / 6.0 / 0.75					5.6 / 6.0 / 0.6			5.6 / 6.0 / 0.30[a]							
11≤hp<25						7.1 / 4.9 / 0.60					5.6 / 4.9 / 0.60			5.6 / 4.9 / 0.30							
25≤hp<50	-					7.1 /4.1 / 0.60					5.6 / 4.1 / 0.45			5.6 / 4.1 / 0.22				3.5 / 4.1 / 0.02			
50≤hp< 75						- / 6.9 / - / -[b]					5.6 / 3.7 / 0.30			3.5 / 3.7 / 0.22[c]				3.5 / 3.7 / 0.02[d]			
75≤hp<100														3.5 / 3.7 / 0.30				0.14 / 2.5 / 3.7 / 0.015[b,c]			0.14 / 0.30 / 3.7 / 0.015[b]
100≤hp<175										4.9 / 3.7 / 0.22				3.0 / 3.7 / 0.22							
175≤hp<300										4.9 / 2.6 / 0.15											0.14 / 0.30 / 2.2 / 0.015[b]
300≤hp<600	-		1.0 / 6.9 / 8.5 / 0.40[b]					4.8 / 2.6 / 0.15						3.0 / 2.6 / 0.15[c]			0.14 / 1.5 / 2.6 / 0.015[b,c]				
600≤hp≤750																					
Mobile Machines > 750hp																					0.14 / 2.6 / 2.6 / 0.03[b]
750hp<GEN ≤1200hp	-					1.0 / 6.9 / 8.5 / 0.40[b]								4.8 / 2.6 / 0.15				0.30 / 2.6 / 2.6 / 0.07[b]			0.14 / 0.50 / 2.6 / 0.02[b]
GEN>1200 hp																		0.30 / 0.50 / 2.6 / 0.07[b]			

a) The PM standard for hand-start, air cooled, direct injection engines below 11 hp may be delayed until 2010 and be set at 0.45 g/bhp-hr.
b) Standards given are NMHC/NOx/CO/PM in g/bhp-hr.
c) Engine families in this power category may alternately meet Tier 3 PM standards (0.30 g/bhp-hr) from 2008-2011 in exchange for introducing final PM standards in 2012.
d) The implementation schedule shown is the three-year alternate NOx approach. Other schedules are available.
e) Certain manufacturers have agreed to comply with these standards by 2005.

: Tier 1 : Tier 2 : Tier 3 : Tier 4 Interim / Final

EXHIBIT 2

File No. 5847-S1
April 28, 2008

Redtree Properties, L.P.
1362 Pacific Avenue
Santa Cruz, CA 95060

Attention: Mr. Jay Fitz

Subject: Proposed Mixed Use Development
2120 Delaware Avenue
Santa Cruz, California
DRAFT ENVIRONMENTAL IMPACT REPORT COMMENTS

Dear Mr. Fitz:

We are pleased to present herewith our comments of the draft environmental impact report (Section 4.2.2.) for the proposed mixed-used development. The subject site is located at 2120 Delaware Avenue in Santa Cruz, California. Our comments are as follows:

1. The 2007 California Building Code (CBC) is effective as of January 1, 2008. The new building code is based on the International Code Council (ICC) and requires a new kind of soil identification and analysis system for seismic design of the foundation. The foundation depth and bearing capacity recommendations contained in a previous report prepared by Haro, Kasunich & Associates, Inc. dated April 2006 still comply with the new code. However, the foundation steel reinforcement may be different with the new code. Therefore we have analyzed and identified the soils under the January 8, 2008 code and provided new 2007 CBC seismic values attached hereto as Exhibit A. With these recommended values, the foundation steel reinforcement design by the Structural Engineer will comply with the 2007 CBC.

2. HKA recommended the upper 4 feet surface soil at the site should be removed and replaced as engineered fill. Given the depth of the footings (24 inches below finished pad grade) and the low bearing capacity (2,000 psf), we believe the removal of the upper 4 feet is slightly conservative. Therefore, we recommend the upper 3 feet surface soil should be removed and replaced as engineered fill. This can be accomplished by sub-excavating the upper 2 feet surface soil. The bottom of the sub-excavated subgrade should be scarified to a minimum depth of 12 inches and re-compacted to at least 90% relative maximum density per ASTM Test Designation D1557-91. Then, the sub-excavated site should be backfilled with excavated soil and compacted in 8-inch lifts to at least 90% to the designed finished grade.

HKA recommended the backfilled soil of the former channel be removed if documents of the backfilled soil compaction are not found. We agreed that the un-documented backfilled soil in the former main channel area should be removed to a competent bottom subgrade. The exact depth of the excavation should be determined at the time of the excavation of the former main channel. Then the sub-excavated former main channel area should be backfilled and re-compacted with excavated soil material in 8-inch lifts to at least 90% relative maximum density.

3. HKA recommended that the site be dewatered 3 to 6 months through a series of subdrains prior to mass grading operations. We concur this is a mitigation of the perched groundwater condition at the site. However, we do not think that a series of subdrains is required. We believe two curtain drain system constructed at the northern property boundary line and, if recommended by the civil engineer at the middle of the site, to an approximate depth of 10 feet below existing ground surface should adequately intercept subsurface seepage water before it enters the site and discharge to the existing drainage channel along the western property boundary line. In addition, this subdrain system would relieve some of the perched groundwater conditions at the site prior to mass grading. It is anticipated that no dewatering will be required during construction.

4. Because of the sand layer at the site measured only 2 feet thick at the depth of 13 feet below existing ground surface, the estimated total settlement is less than 1 inch as induced by the liquefaction. Based on the thickness of the overlying non-liquefaction layer, the ground surface damage as induced by the liquefaction is minimal. We believe that additional field investigation for the liquefaction is not necessary.

If you have any questions or require additional information, please feel free to contact our office at your convenience.

Very truly yours,

UNITED SOIL ENGINEERING, INC.

Sean A. Deivert
Project Manager

Vien Vo, P.E.

5847.DEIRC/Copies: 4 to Redtree Properties, L.P.

File No. 5847-S1
April 22, 2008

Redtree Properties, L.P.
1362 Pacific Avenue
Santa Cruz, CA 95060

Attention: Mr. Jay Fitz

Subject: Proposed Mixed-Used Development
2120 Delaware Avenue
Santa Cruz, California
ADDITIONAL GEOTECHNICAL RECOMMENDATIONS

Dear Mr. Fitz:

Pursuant to your request, we are pleased to transmit herein additional geotechnical recommendations for the proposed mixed-used development. The subject site is located at 2120 Delaware Avenue in Santa Cruz, California.

Based on the field investigation and laboratory results, we recommended the followings for the seismic design of the proposed structure in according to the 2007 CBC.

Zip Code: 95060
Latitude: 36.955486
Longitude: -122.050135

2007 CBC SEISMIC VALUES

Site Class: D (Table 1613.5.2 CBC 2007)

Mapped Spectra Acceleration for short periods S_S = 1.5g*

Mapped Spectra Acceleration for 1-second period S_1 = 0.6g*
* USGS Seismic Hazard Curves and Uniform Hazard Response Spectra for 2007 CBC analysis

Site Coefficient F_a = 1.0 (Table 1613.5.3(1) CBC 2007)

Site Coefficient F_V = 1.5 (Table 1613.5.3(2) CBC 2007)

Maximum considered earthquake spectral response accelerations for short period S_{MS} = 1.5g ($S_{MS} = F_a S_S$ – Equation 16-37 CBC 2007)

Maximum considered earthquake spectral response accelerations for 1-second period S_{M1} = 0.9g ($S_{M1} = F_V S_1$ - Equation 16-38 CBC 2007)

If you have any questions or require additional information, please feel free to contact our office at your convenience.

Very truly yours,
UNITED SOIL ENGINEERING, INC.

Sean A. Deivert
Project Manager

Vien Vo, P.E.

5847.AGR/Copies: 3 to Redtree Properties, L.P.

DELAWARE ADDITION - Project Water Demand Estimates - Comparison

24-Apr-08

Proposed Use	Delaware Addition per dEIR			Tannery Arts Center			Annual Demand for **Delaware Addition** using Tannery Equiv MG/YR
	Amount SF	Water Demand Rate	Annual Demand MG/YR	Amount SF	Water Demand Rate	Annual Demand MG/YR	
Retail	33,850	0.000200 AFY/sf	**2.21**	12,500	0.000070 AFY/sf	0.30	**0.77**
Irrigation or Landscaping	102,681	18.20 gpy/sf	**1.87**	36,200	4.14 gpy/sf 0.55 AFY/acre 0.0000126 AFY/sf	0.15	**0.42**
Residential	248 units 248 beds	108.00 gpd/unit	**9.69**	102 units 206 beds	157.00 gpd/unit 77.74 gpd/bed	5.90	**7.04**
Indus/Comm	304,652	0.00007 AFY/sf	6.95				6.95
TOTALS			**20.72**				**15.18**
Available Water Supply:	300 MG/YR		**6.9%**				**5.06%**

Alt Residential Calc:
Using Water Dept Standard for Water Efficient Residential Development

50	gpd/resident
372	residents (see note 4)
6.79	
14.93	
4.98%	

Notes

1) The Tannery Arts Center's Landscape Water Demand rate is taken from rates developed by the Monterey Peninsula Water Mgmt District

2) The Delaware Addition's Landscape Water Demand rate is per Toby Goddard, City of Santa Cruz Water Dept

3) The Retail Water Demand Rates are BOTH taken from rates developed by the Monterey Peninsula Water Management District

4) The maximum number of Delware Addition residents is taken from page 4-88 of the Draft EIR:

"Impact 4.6-2: At full buildout, the proposed project would generate a maximum of 372 new residents in the City of Santa Cruz..."

EXHIBIT 4

Response to Comment Letter # 10
Stephen K. Cassidy (Cassidy, Shimko, Dawson & Kawakami (for Redtree Properties, LP)
April 30, 2008

10-1 Draft EIR Adequacy

Review of the DEIR by the applicant and applicant's consultants concludes that the DEIR is legally sufficient under CEQA. Comment is noted; no response is necessary.

10-2 Project Description – Required Permits

See Response to Comment 10-8.

10-3 Hydrology and Water Quality – Mitigation Measure Change

The City cannot accept the suggested language changes for Mitigation Measure 4.4-2b as these conflict with RWQCB requirements for signed agreements and annual reports.

10-4 Traffic and Transportation – Correction

The EIR text has been revised to remove the mention of Mitigation Measure 4.5-2c, which was erroneously included in the Draft EIR. See section 2 – Revisions to Draft EIR.

10-5 Project Description – Clarification

The comment requests that the discussion of a Property Owner's Association be revised. The revisions are included in the "Revisions to Draft EIR" section.

10-6 Project Description – Lighting Design Guidelines

The comment requests that the text be revised to clarify that a final lighting plan will need to be provided for issuance of a Design Permit for the site. This revision is included in the "Changes to Draft EIR" section. An exterior lighting plan shall also be required to be provided in conjunction with the development of future buildings.

10-7 Project Description – Design Review Process

The comment indicates that the requirement for a Design Permit for future buildings that deviate from the approved design is inconsistent with language currently included in the Draft Development Agreement, and should be revised. The City is willing to consider this request provided the Draft Design Guidelines are amended to provide a more definitive level of design standards and guidelines for the overall development. This request to deviate from the City's standard Design Permit process will be further reviewed by City staff and decision makers as part of the project review.

10-8 Project Description – Shared Parking/Special Use Permit

The comment indicates that the FEIR discussion should be revised to include analysis related Shared Parking Facilities reduction under Municipal Code section 24.12.290.5. The section allows for off-site parking facilities by two or more commercial uses to be shared if their entrances are located within 300 feet of the parking facility and if their hours of operation do not coincide. Since this development is not requesting to share parking facilities with an off-site parcel within 300 feet of the development and since it cannot be quantified at this time what uses will be located in a specific building or what

their hours of operation would be, the project is not eligible for this reduction. The City has utilized the parking reduction for parking located at a separate location and not for a new project being developed as a whole. Further, the EIR analysis accounts for parking reductions that total 20 percent as may be allowed under other sections of the Municipal Code. Additional parking reductions may also be allowed provided a parking study demonstrates actual parking conditions warrant reduced parking requirements as specified in Mitigation Measure 4.5-5a.

10-9 Project Description – Zoning Ordinance Compliance

The comment indicates that the discussion regarding compliance with the requirements of a Planned Development should be deleted as CEQA does not require review of compliance with zoning designations. Although a discussion of consistency with the Zoning Ordinance is not identified in CEQA Guidelines section 15125(d), the preliminary discussion was included to provide a greater level of review regarding the amenities provided with a Planned Development and was reviewed by City staff as part of the DEIR preparation. Although the applicant may be correct that the DEIR was not required to include this information, there is certainly no harm in including it, as it will be useful at the time of action on the project. The City Council will make the final decision regarding consistency with City ordinances as part of the project review process.

10-10 Project Description – Biological Resources

The comment indicates that the applicant will revise the Project Site Plan to eliminate creek setback encroachments, and the discussion regarding impacts to biological resources should be eliminated. The impact and mitigation discussion in the EIR are not altered, but the mitigation measure is now proposed by the project as indicated in the comment. Thus, the text is revised per CEQA Guidelines section 15126.4(a)(1)(A) to distinguish that this is a mitigation measure proposed by the project as the applicant has agreed to modify the site plan to eliminate this encroachment. See “Revisions to Draft EIR” section.

10-11 Project Description – 2005 and 2030 GP Policies

The comment indicates that CEQA Guidelines require that a DEIR need only address “inconsistencies” with applicable General Plan policies, and notes that the project is consistent with these policies. Comment is noted. The comment states that the project is consistent with the City’s adopted 2030 General Plan policies, which should be included in the FEIR. The City is currently in the process of completing a draft General Plan, which will undergo environmental review, and be presented to the City Planning Commission and City Council for adoption in early 2009. At this time, the City does not have an adopted 2030 General Plan. In June 2007, the City Council reviewed and accepted draft policies for completion of the draft General Plan, but did not specifically adopt any policies. Thus, the 2005 General Plan that is the current General Plan in effect that will govern the land use approvals for this Project. Therefore, this discussion is not appropriate to amend.

10-12 Environmental Analysis – Worst Case Scenario

As noted in the DEIR (page 3-3), the proposed project is designed to accommodate both established and start-up businesses of different needs, sizes and uses. Thus, the proposed distribution of non-residential land uses on the site includes warehouse, light manufacturing, research & development, office and retail. Since the proposed lots would

be developed and/or sold over time, the final buildout of land uses would vary depending on market conditions and demand.

As noted in Section 15064(d), CEQA requires that the Lead Agency consider both direct and indirect physical changes that are "reasonably foreseeable". Given the fact that the exact mix of land uses has been defined as a range that will vary based on market demand, the impact analysis, particularly as it relates to traffic, parking and water demand assumed a conservative "worst case" analysis so as not to potentially underestimate the project impacts.

Furthermore, a Mitigation Monitoring and Reporting Program has been prepared for the proposed project which will be used to determine the specific mitigation requirements, implementing actions, responsible parties, and timing of such mitigation over time as the project is developed.

10-13 Air Quality - Mitigation Measure 4.4-1b (Biodiesel)

Comment is noted. See Response to Comment 8-4.

10-14 Air Quality - Mitigation Measure 4.4-1b (Construction Equipment)

Comment is noted. See Response to Comment 8-4.

10-15 Air Quality – Mitigation Measure 4.1-2 (Health Risk Assessment)

Mitigation Measure 4.1-2 on page 4-20 of the Draft EIR has been modified to include additional performance measures in accordance with MBUAPCD Rule 1000, *Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants.* See Chapter 2 – Revisions to Draft EIR.

10-16 Geology and Soils – Current Code Compliance

Comment is noted that the applicant's geotechnical consultant, United Soil Engineering, has concluded that there is no change in project geotechnical recommendations as a result of the California Building Code changes. The referenced letter is so noted, and will be reviewed by the City Building Department staff as part of the grading and building permit review to determine whether or not additional geotechnical report modifications are required based on the provisions of the California Building Code at the time of submittal.

10-17 Geology and Soils –Removal of Mitigation Measure 4.2-1a

See Response to Comment 10-16.

10-18 Geology and Soils – Dewatering Methodologies

Comment is noted regarding review of curtain drain. Furthermore, the project applicant has revised their site design to incorporate a second curtain drain across the middle of the site. See revisions and expanded Geology and Soils text in Chapter 2 – Revisions to Draft EIR.

10-19 Hydrology and Water Quality - Correction

Comment noted. Table 4.4-1 of the FEIR has been revised to reflect a total net change of stormwater runoff from 12.54 to 15.54.

10-20 Acronym Correction

The City staff appreciates the identified correction. The Final EIR text has been clarified to show MEP "Maximum Extent *Practicable*", as opposed to "Maximum Extent *Possible*" for Mitigation Measure 4.4-2d. See "Revisions to Draft EIR" section. The cited policy language in Table 3-5 reflects the existing language in the General Plan and need not be changed.

10-21 Hydrology and Water Quality – Previous Pavement LID

Comment is noted. Please see Response to Comments 2b-1 and 2b-3.

10-22 Hydrology and Water Quality – Storm Drain Discharge

Comment indicates that the Arroyo Seco channel will provide additional cleansing of stormwater effluent prior to discharge to the Pacific Ocean as the channel consists of rock, grasses and willows. Comment is noted, but is contrary to current City and State Best Management Practices which require treatment prior to discharge into a watercourse.

10-23 Project Description – Trails

With regards to page 4-62, the comment requests that the FEIR be clarified to indicate that (i) Redtree will be responsible for connecting the sidewalk to the trail, which dead-ends at that point, and (ii) Redtree will not be responsible for any future connection of the trail to the Union Pacific Railroad right-of-way. Based on previous discussions with the applicant, the language in the FEIR and Development Agreement will be modified as shown in the "Revisions to Draft EIR" section.

10-24 Transportation and Traffic – Shared Parking

The comment indicates that the FEIR discussion should be revised to include analysis related Shared Parking Facilities reduction under Municipal Code section 24.12.290.5, which would further reduce project parking demand. As discussed in Response to Comment 10-8, this section of the Zoning Ordinance allows off-site parking facilities by two or more commercial uses to be shared if their entrances are located within 300 feet of the parking facility and if their hours of operation do not coincide. Since this development is not requesting to share parking facilities with another adjacent parcel and cannot quantify at this time what uses will be located in a specific building or what their hours would be, the project is not eligible for this reduction. See Response to Comment 10-8.

10-25 Traffic and Transportation – Swift/Delaware Fair Share

Mitigation Measure 4.5-1a requires that the project applicant to install a traffic signal or construct a roundabout (as determined by Public Works) at 50 percent of project buildout. The project applicant will be required to construct the improvement. The applicant will then be reimbursed by the City based on the proportional share of cumulative traffic the project contributes to the intersection (i.e. project costs x project trips/cumulative existing traffic). Because the project applicant will be assessed a Traffic Impact Fee based on daily trips (currently at $366/trip), this payment will be credited from the applicants improvement costs associated with the constructed improvements at Swift/Delaware.

10-26 Traffic and Transportation – Traffic Impact Fee Payment

Traffic impact fees will be collected in accordance with City regulations in which the fee is paid at the time of building permit issuance for each building based on the use for which the building permit is issued. Mitigation Measure 4.5-2a has been clarified; see "Revisions to Draft EIR" section.

10-27 Traffic and Transportation – Caltrans Level of Service

See Caltrans Response to Comment 4-4.

10-28 Project Description – Trails

The comment notes that the DEIR mentions the SCCRTC's recommendation that the Project "include access to and from the property on its northern boundary to the existing rail line [right-of-way]." The comment requests that the FEIR be clear that, although the Project design provides an opportunity for a connection, any future connection of the new Arroyo Seco trail to the Union Pacific Railroad right-of-way is not Redtree's responsibility. See Response to Comment 10-23 above.

10-29 Transportation and Traffic – Shared Parking

The parking analysis presented in the Draft EIR was based on review of City parking requirements and incorporated parking reductions. See Response to Comment 10-8 regarding shared offsite parking.

10-30 Transportation and Traffic –Parking Mitigation Measure

Please see Master Response T-1 – Parking Demand and Supply.

10-31 Traffic and Transportation – Parking Requirements

Please see Master Response T-1 – Parking Demand and Supply.

10-32 Traffic and Transportation – Parking Demand

Please see Master Response T-1 – Parking Supply and Demand regarding project parking demand, Response to Comment 10-12 regarding CEQA analyses, and Response to Comments 10-8 regarding offsite shared parking.

10-33 Traffic and Transportation – Excess Parking Impact

Comment regarding excessive parking and its environmental impact on traffic and air quality is noted and referred to City staff and decision makers for further consideration.

10-34 Traffic and Transportation – Calibration of Mitigation Measures

The timing of mitigation implementation is included in mitigation measures where required will be further specified in the Mitigation Monitoring and Reporting Program to relate to project levels of development. See also Response to Comment 10-12.

10-35 Water Supply – Impact Analysis Methodology

Please see Master Response WS-1 – Water Supply.

10-36 Water Supply – Development Agreement

Please see Master Response WS-1 – Water Supply.

10-37 Water Supply – Impact Analysis Methodology

Please see Master Response WS-1 – Water Supply.

10-38 Water Supply – Project Water Demand

Please see Master Response WS-1 – Water Supply.

10-39 Water Supply –Mitigation Measure 4.6.3a

As discussed in the DEIR, the City disagrees with the assertion that water supplies will be adequate to serve the project and that Mitigation Measure 4.6-3a should be deleted. Notably, however, the City has modified Measure 4.6-3a to address some of the applicant's concerns, as set forth in a later communication received after the close of the comment period on the Draft EIR. The applicant's contention that the proposed project's impacts on the City's water supply would be less than significant is premised on the fact that the City *currently* has sufficient water supplies in normal and wet precipitation years to serve the full project if it were to build out in the near future. The applicant overlooks the fact that the City's current "surplus" is not sufficient to serve other undeveloped properties in the City that, like the project site, are identified for development in the City's current (1990) General Plan. Because the proposed project is not expected to build out until the current water supply is fully allocated, and because, further, the City believes that other currently vacant properties planned for development also have some claim on City water, the City has chosen to assess the significance of the project's impacts on the City's water supply with these other properties in mind. Please see Master Response – Water Supply.

10-40 Water Supply - Mitigation

Comment indicates that the applicant is committed to incorporating the water-conserving measures into the project as set forth in Mitigation Measure 4.6-3b and will pay the System Development Charge. This comment is noted, and the City appreciates the applicant's cooperation with respect to these issues.

10-41 Biological Resources - Grading

Mitigation Measure 4.8-2b has been revised to permit grading in accordance with City grading ordinance requirements, except for construction of the drainage outlets into Arroyo Seco Creek. Due to the proximity of construction work with a watercourse, construction outside of the rainy season would be required for this area. See Chapter 2 – Revisions to Draft EIR.

10-42 Cumulative Mitigation Measure

With regards to Chapter 5, the DEIR does provide a conclusion for each cumulative impact discussion as to whether the cumulative impact is significant, and if so, whether the project's contribution is cumulatively considerable given project mitigations. If a cumulative impact is not determined to be significant, no further discussion is required. Three significant cumulative impacts were identified: contribution to global climate change, traffic impacts at intersections and long-term water demand and supply. The DEIR as supplemented by Master Response CUM-1 indicates that the proposed design

and feature of the project would reduce the project's greenhouse gas emissions to level in which it was concluded that the project's incremental effect would not be cumulatively considerable. To reduce the project's contribution to the transportation impacts, the applicant will be required to pay their fair share fee (currently $366 per trip) towards the City's Traffic Impact Fee (TIF) program, although as noted two intersections will not be improved to an acceptable level. To reduce the project's contribution to water supply impacts, the applicant will be required to implement various water-conserving features as described in Mitigation Measure 4.6 and pay the City's required "System Development Charge" that is used in part to implement conservation programs and costs of the planned desalination project. However, these measures would not reduce the project's incremental effect to less than cumulatively considerable.

10-43 Cumulative Significant and Unavoidable Impacts

As discussed in the DEIR and in Response to Comment 10-42 above, two identified significant cumulative impacts would not be fully mitigated in the future. Although the project payment of traffic impact fees would reduce the project's incremental cumulative effect, the measures identified to improve the cumulatively impact intersections would not result in acceptable levels of service. The project's implementation of required water mitigation measures would not reduce the project's incremental cumulative effects. These two cumulative impacts are included in the Significant Unavoidable Impacts list contained in Chapter 2 of the DEIR for which a statement of overriding consideration would be prepared.

10-44 Cumulative

Comment notes that, in the applicant's view, the only real significant unavoidable cumulative impact relates to traffic at the Mission Street/King Street and Mission Street/Chestnut Street intersections, as the commenter believes the project will not contribute to significant unavoidable impacts for water supply. Comment on traffic is noted. Regarding water impacts, see Master Response WS-1 – Water Supply and Response to Comment 10-39.

10-45 Cumulative Project List

Comment states that some projects on the cumulative project list are relocations (Kirby School) or replacement of existing uses (e.g., Ocean Street Hotel, Tannery Arts Center, 706-708 Frederick Street) and should not be included in the cumulative analysis. The referenced projects, as well as some others on the Table 5-1, do not represent "replacement" projects as suggested in the comment, but rather represent intensification of an existing use or a new use when a previous use has been discontinued on the site. CEQA Guidelines require impact analyses to compare project conditions to existing baseline conditions. Thus, on sites where previous uses have not been effect (e.g., Kirby School, Tannery), the cumulative projects are considered new development. On sites where there is some existing development, such as the Ocean Street Hotel, only the net increase in new development is factored into the traffic and water analyses.

10-46 Cumulative Projects

See Response to Comment 10-45.

10-47 Cumulative Water Supply Impact

Commenter believes sufficient water supplies are available to serve the project under both project and cumulative scenarios, and the less-than-significant project impact would not be cumulatively considerable. As analyzed in the DEIR and in discussed Master Response WS-1 – Water Supply in this FEIR, the City disagrees with this assertion for the reasons stated in the Master Response on Water Supply and Response to Comment 10-39, including the fact that the 15-year buildout timing of the project that would be within a period when remaining available water supply capacity may be reached.

10-48 Hydrology and Water Quality – Low Impact Development

See Response to Comment 10-21, 2b-1 and 2b-2.

10-49 Alternatives – Alternative 2 Traffic Analysis

The typo regarding Alternative land use assumptions for the traffic analysis has been corrected; see Chapter 2 – Revisions to Draft EIR. The Appendix H Exhibit correctly shows trip reduction, excluding residential uses, and has been corrected to eliminate the retail use. The trip summary on Table 5-15 correctly summarizes the total trips for this alternative. The parking demand on Table 5-10 is accurate as the City has allowed a parking reduction of mixed industrial/commercial uses.

10-50 Alternatives – Alternative 2 Meeting Objectives

The uses listed on page 5-42 are examples of what uses might be included in the alternative, but are not all inclusive. Generally, the alternative eliminates residential and retail uses, but a mix of industrial and commercial uses would be maintained. Thus, the five listed objectives related to business development and green building would continue to be met under this alternative.

10-51 Alternatives – Alternative 3 Inconsistencies Correction

Text on pages 5-48 to 5-49 has been corrected to delete the typographical errors regarding reference to no residential uses in this alternative.

10-52 Alternatives – Alternative 3 Traffic Analysis

The commenter is correct in that the proposed project would not include flex units. Table 5-12: Alternative 3 – Trip Generation has been modified to eliminate flex units from the table, which was a typographical error in the Draft EIR. Table 5-12 was also modified to clarify that this alternative would include 41 residential flats and 77 work/live townhouse residential units as noted in paragraph 2 on page 5-48 of the Draft EIR. The weekday daily trips and the AM and PM peak hour trips has been modified herein. See Chapter 2 – Revisions to Draft EIR.

Based on this breakdown of residential units in Alternative 3, the work/live reduction (for the 77 work/live units) and the internal trip reduction (for internal trip reduction based on the various uses) would still apply to this alternative. In addition, the ten percent reduction due to shared use would also apply. This alternative would result in 3,071 weekday daily trips, 423 trips during the AM peak hour, and 408 trips during the PM peak hour. However, the level of service impacts described in the Draft EIR for this alternative would not change.

10-53 Alternatives – Alternative 3 Meeting Objectives

Please see Master Response ALT1 – Alternatives Analysis.

2395 Delaware Avenue, #21
Santa Cruz, CA 95060

Tel (831) 466-3332
Fax (831) 466-3332
email rcurry@aasi.com

Sandy J. Brown, Contract Planner
Department of Planning & Community Development
City of Santa Cruz
809 Center Street
Santa Cruz, CA 95060

RE: Comments on DEIR for 2120 Delaware Avenue.

Dear Ms. Brown:

Please consider the following comments on traffic and parking

Sincerely,

Renwick E. Curry

Nancy C. Knudegard

Renwick E. Curry

Nancy C. Knudegard

1. **What is mitigation 4.5-2c mentioned on page 4-70?**
2. Table 4.5-2 shows 84 flats and 77 work/live townhouses. However, the table of trip generations (Table 4.5-3) shows 0 flats and 94 work/live units.

   Why are the number of flats and townhouses different in each table?
3. Table 4.5-3 shows an internal trip reduction of 15% of BOTH the industrial/commercial (1,293 trips) and the residential (94 trips). It would be valuable to have the a worksheet for this table which is the information contained in Exhibit 7 (Appendix H).

   Why doesn't the reduction apply to the residential trips only, since the Industrial/Commercial trips would occur whether or not residences were on site or not.
4. The page title on Exhibit 5, Appendix H is uninformative.

   What are the assumptions behind Exhibit 5, page 9?
5. The observed on street parking demand table in Exhibit 17 (Appendix H, pages 30 & 31):

   How many days of observation? What time of year?

What are the meanings of "C", "T", "M" in Exhibits 17

How many equivalent car lengths are "T" and "M"?

6. The long-term traffic demand depends on known projects and leaves out unknown projects. Other traffic studies assume a background growth of traffic based on long term averages.

   How does the study account for unknown projects and other demand that will occur in the future?

   What is the predicted baseline traffic growth other than identified projects?

7. App. H Exhibit 17B states 120 spaces capacity on Delaware. Is this between Swift and Swanton? Page 4-59 of EIR text states that between Swift and Swanton, Delaware has 130 spaces at 25 feet. A footnote on Exhibit 17A states capacity at 22 feet is 136 spaces.

   Why the inconsistency between the two charts and the text?

8. Page 4-59 of EIR text states that between Swift and Swanton, Delaware has a peak parking occupancy of 45% (using a space capacity of 130). This survey was done in June 2006, nearly two years ago.

   Are the conclusions about parking availability on Delaware understated and out of date?

9. Street parking is open to any public use, and not reserved for use by any particular business.

   What is the purpose of the extensive street parking study?

10. The EIR states that the proposed plan includes 845 spaces (page 4-61). Parking demands for the proposed project would exceed this supply by 683 spaces. (Total demand of 1438 – 845 = 683). Mitgation measure 4.5-5a allows the applicant to submit a revised site plan to accommodate all parking on-site.

    Why is this considered a mitigation? Why shouldn't the original site plan accommodate ALL parking on-site from the outset?

11. Mitigation measure 4.5-5b would require implementation, monitoring and enforcement of several Transportation Demand Management measures.

    Who are the parties responsible for implementation, monitoring and enforcement? What are the penalties for not fulfilling required Transportation Demand Management measures?

12. **What impact would insufficient parking for this project have on the already established nearby businesses?**

13. Table 4.5-3 on page 4-64 indicates that live/work trip generation in years 1-3 is reduced by 30%. After a 30% reduction takes place, the remaining live/work trips are again reduced by 15%.

Why do live/work trips receive a double reduction?

14. In table 4.5-3 on page 4-64, for Buildout trip generations, the live/work trips again receive a double reduction, yet the flats receive only a 15% trip reduction. Live/work units and flats are both defined as Residential land uses for the project (page 4-64).

Why are live/work units treated differently from flats in trip reduction?

15. There seems to be a typo in App. H, exhibit 13C showing Weekday PM Peak Hour traffic volume for 2006 as 31,110.

Is the correct number 3110?

Response to Comment Letter # 11
Renwick E. Curry and Nancy C. Knudegard
Not Dated – Received April 30, 2008

11-1 Traffic and Transportation – Mitigation Measure 4.5-2c Correction

The EIR text has been clarified to remove the mention of Mitigation Measure 4.5-2c, which was erroneously included in the Draft EIR. See Chapter 2 – Revisions to Draft EIR.

11-2 Traffic and Transportation – Clarification

As discussed in the Draft EIR Transportation and Traffic section, Table 4.5-2: Project Years 1-3 and Buildout Development Assumptions shows the *number* of projected residential units and *square footages* of commercial/industrial development. On the other hand, Table 4.5-3: Project Years 1-3 and Buildout Worst Case Trip Generation, shows the projected *trip generation* based on the uses and assumptions described in Table 4.5-2.

For example, Table 4.5-2: Project Years 1-3 and Buildout Development Assumptions shows the number of flats and townhouses (84 and 77 respectively) mentioned by the commenter, whereas Table 4.5-3: Project Years 1-3 and Buildout Worst Case Trip Generation shows the number of trips generated by these units (Years 1-3: 94 Weekday Daily Trips, seven AM Peak Hour, and nine PM Peak Hour trips). Thus the numbers between these two tables are not comparable.

11-3 Traffic and Transportation –Trip Reduction

As discussed in the Draft EIR Transportation and Traffic subsection 4.5.3, the 30 percent internal trip reduction is applied to trips generated by the industrial/commercial uses, specifically due to the presence of the work/live units. As described in the Draft EIR, work/live units result in up to 50 percent of the residents working in the downstairs work area, thereby reducing the number of trips to and from the project site.

The 15 percent internal reduction is due to the mixed-use nature of the proposed project. In a mixed-use development, trip generation has to take into consideration the fact that some of the trips counted at are made within a mixed-use development, that is, some trips are made internally, without leaving the project site. The most common example of this trip-making occurs at mixed-use developments that include both residential and commercial uses, such as with the proposed project, where some of the residents' work trips and shopping trips are made to the on-site shopping area.

11-4 Traffic and Transportation – Appendix Exhibits

The Exhibit of Appendix H includes the Level of Service analysis results for each alternative and the project at buildout, which represents the worst-case scenario level of service. This worst-case scenario assumed the maximum range of development for research and development, office, and retail uses, which generate more average daily and peak hour trips, as compared to warehouse and light manufacturing (also see Draft EIR Table 4.5-2: Project Years 1-3 and Buildout Development Assumptions). Assumptions for development are included in the DEIR Traffic section and Alternatives section. The Exhibit 5 titles will be clarified in the Final EIR to reflect these assumptions.

11-5 Traffic and Transportation – Appendix Exhibit

Data for the street parking demand presented in Exhibit 17a and 17b was collected by Higgins Associates along Delaware Avenue between Swanton Boulevard and Getchell Street and Swift Street between Modesto Avenue-Wanzer Street and Ingalls Street during June 2006. The purpose of the counts was primarily, a parking utilization study, conducted in 15 minute increments on a weekday between 8 AM to 5 PM.

11-6 Traffic and Transportation – Appendix Exhibit 17 Clarification

In Appendix H Exhibit 17a and 17b the letters C, M, and T stand for passenger car, large truck, and medium-size truck, respectively.

11-7 Traffic and Transportation – Appendix Exhibit 17 Clarification

Large trucks (T) are 40 to 50 feet or three to four car lengths.

Medium-sized trucks (M) are approximately 30 feet or two to three car lengths.

11-8 Traffic and Transportation –Cumulative Analysis

With respect to the analysis of cumulative traffic assumptions, the City's accepted methodology is to use known identified projects (as listed in Table 5-1 of the DEIR) rather than a predicted baseline as this methodology has been found to be more accurate and is consistent with approaches set forth in the State CEQA Guidelines.

11-9 Traffic and Transportation – Traffic Future Growth

See Response to Comment 11-8.

11-10 Traffic and Transportation – Appendix Exhibit 17

As shown in the Appendix H, Exhibit 17a illustrates parking demand on Delaware Street, whereas the Exhibit 17b illustrates parking demand on Swift Street. As these exhibits describe parking conditions on two different streets, the results are not the same.

11-11 Traffic and Transportation – Parking Study Validity

As neither the street layouts nor the land uses in the vicinity of the parking study have changed, the parking demand calculations are deemed valid.

11-12 Traffic and Transportation – Street Parking Study

The purpose of the street parking study was to determine if there was any excess capacity of parking in the area. The study concluded that there was not excess capacity, particularly during the evening (PM) hours.

11-13 Traffic and Transportation – Parking Mitigation

Please see Master Response T-1 – Parking Demand and Supply.

11-14 Traffic and Transportation – Traffic Demand Management Enforcement

The project applicant is responsible for implementing a Traffic Demand Management (TDM) plan and monitor it on a monthly basis. The project applicant is required to submit an annual report to the City regarding the project's compliance with the TDM.

Ultimately, the City is responsible for enforcement of the TDM consistent with Chapter 10.45 of the Municipal Code.

11-15 Traffic and Transportation – Traffic Demand Management Enforcement

The Mitigation Monitoring and Reporting Program outlines how monitoring of this requirement will occur. There are no established penalties for not complying with the TDM. However, the applicant could risk possible legal action by not complying with a City ordinance(s). Legal action could include, but is not limited to, revocation of the use's right to occupy a space if it fails to comply with the conditions of approval.

11-16 Traffic and Transportation – Parking Impact on Businesses

Please see Master Response T-1 – Parking Demand and Supply. As described in Traffic and Transportation section of the Draft EIR, implementation of Mitigation Measures 4.5-5a and 4.5-5b would reduce the project's parking demand impact to a l*ess-than-significant* level. Therefore, with adequate on-site parking, no significant off-site impacts are anticipated.

11-17 Traffic and Transportation – Parking Reduction Clarification

Please see Response to Comment 11-3.

11-18 Traffic and Transportation – Live/Work Parking Clarification

The flat units are purely residential and do not contain a workspace, which is included in the live/work units. The 30 percent trip reduction applies specifically to live/work units.

Also, please see Response to Comment 11-3.

11-19 Traffic and Transportation – Appendix Exhibit Correction

With regards to Traffic Appendix H, Exhibit 13C, the exhibit text has been clarified for weekday PM peak hour volumes for total short- plus long-term development in 2006 to show 3,110 as opposed to 31,110.

Edward J. Davidson

200 Button Street #15
Santa Cruz, CA 95060
TEL/FAX 831 423-9294
April 3, 2008

Subject: 2120 Delaware Ave. Draft EIR

Dear Planning Commissioners,

In view of Judge Burdick's tentative holding in the City vs. UCSC challenge to the LRDP, the long range outlook for the City's water supply requires thorough analysis. Since the proposed addition of up to 248 new residential units will also impact the existing water supply, the Cumulative Impact analysis must be as comprehensive as possible.

During the past few years, most projects, large and small, have avoided the in-depth cumulative impact analysis required of UCSC. The "conservation only" approach used by the City can no longer suffice as long term water supply policy. Until this issue is resolved, the future of all development in Santa Cruz, Live Oak and northwest Capitola is in doubt. This could delay worthwhile projects such as the subject of this EIR.

The analysis must include all recent and proposed projects such as the following:

-UCSC's LRDP and Marine Sciences campus,
-La Bahia and Holiday Inn Express hotels,
-The proposed hospital/clinic at the Skyview Drive-in,
-Mixed-use residential/commercial projects on Pacific, Ocean, Mission and Soquel,
-Condominiums and special needs housing in downtown, Lower Ocean, the east side and Seventh Ave,
-Numerous minor subdivisions with 3-4 condos replacing single family residences in the R-L district, along with ADU's and SRO's

I would note that the Home Depot and new Safeway on 41st Ave are in the City's water district although they may not increase water use of the buildings they replaced. The above list is exemplary of the kind of in-depth analysis required by CEQA. The future of Santa Cruz development demands a long-range solution to our water supply deficiencies.

Respectfully submitted,

Ed Davidson

Ed Davidson

Response to Comment Letter # 12
Edward J. Davidson
April 3, 2008

12-1 Water Supply – Cumulative Analysis

Comment indicates that the cumulative impact analysis on water supply must be as comprehensive as possible given the tentative ruling in the City's challenge to the UCSC LRDP case. Comment is noted, and cumulative impacts on water supply are thoroughly addressed on pages 5-19 through 5-24 of the Draft EIR.

12-2 Cumulative Water Supply

The cumulative analysis in the DEIR identifies known projects and growth on Table 5-1, which reflect the projects within the City that are cited in the comment. Known cumulative County development projects are accounted for in the cumulative water demand estimates on Table 5-3. Additionally, as indicated on page 5-23 of the DEIR, the City regularly monitors and reports water consumption and demand via annual reports. Under State law, the City's Urban Water Management Plan must be updated every five years, and the next version of that document will include updated development, growth and water demand projections for all of its service area, including areas outside City limits. Thus, cumulative development and growth is addressed in the Cumulative Impacts section of the DEIR and demand is reviewed in an ongoing manner by the City Water Department.

12-3 Water Supply

See Response to Comments 12-1 and 12-2.

30 April 2008

Santa Cruz Planning Department
Attn: Sandy Brown, Contract Planner
809 Center Street, Room 206
Santa Cruz, CA 95060

Re: **Delaware Addition Mixed Use Project**
2120 Delaware Avenue, Santa Cruz

Dear Ms. Brown:

This letter is in response to the Part 4.7, aesthetics portion of the Draft EIR and is intended to be a general commentary on certain features of the proposal. While I do applaud the choice of mixed uses and the flexibility planned in that regard, I have a number of concerns which are as follows:

1. Site coverage: From the CADD perspectives the project appears to almost completely cover the site with either buildings or pavement. In this day and age that appears to be poor planning. The perspectives are perhaps misleading as they do not appear to show cars; instead, it looks as if it could be open space. My suggestion would be to not build on at least fifty percent of the land.

2. Street layout: Boring, bowling ball streets with parking on both sides. Perhaps the cheapest and the easiest, but not the right answer. In general, not all research and development and office space need to be on a ground floor. Perhaps create as second floor street or better yet, a second floor outdoor mall space in the center that would spider out to a few of the external spaces and exclusive of cars. The automobile should not determine the design.

3. Height limit: There seems to be this pervasive feeling in Santa Cruz that height is bad and only one and two story buildings should be allowed. This is an industrial area. For example, what if most of the two outer rows of buildings and the north and sound sides were eliminated and that density was concentrated more in the center, say somewhat pyramidal in overall form (but not a mega building). Let the top be as much as sixty or eighty feet. Not all trees grow to the same height. Think variety. Put much of the parking underground (yes, more expensive). Views from the upper floor spaces would be fantastic, would not dominate over the adjacent properties and would bring more rent/sales.

4. Solar: With few exceptions, the conceptual buildings all have north–south building orientation rendering them inefficient for integrated photovoltaic and thermal panels. We must mitigate global warming as much as we can.

Unfortunately I've read only a portion of the draft EIR and this letter is being written at the last minute in order to get it in before the comment deadline of 5:00 pm 30 April—no more time to make remarks except that as a thirty-three year resident of the City of Santa Cruz (and even more in Santa Cruz County), I believe this project needs a great deal of additional thought and changes.

Sincerely (and in haste),

James R. Ellmore, Architect Retired
343 Soquel Ave, PMB 151
Santa Cruz, CA 95062

Response to Comment Letter # 13
James R. Ellemore
April 30, 2008

13-1 Project Design - Impervious Surfaces

Comment is noted regarding support for the choice of mixed uses. Commenter notes that the proposed project appears to cover the site with impervious surfaces and requests that the project include approximately 50 percent open space. The project site is designated for industrial use in the City's General Plan and zoning ordinance. The project site is also designated for industrial infill and intensification in the City's General Plan. The proposed project meets the site coverage requirements based on the proposed use and underlying general plan and zoning designation. Under the IG zone district, the maximum lot coverage allowed is 80%. In addition, up to an additional 5% of surface area may be installed if that area serves as a usable outdoor employee amenity such as recreation or eating facilities, children's play area or similar features. According to the project architect, about 31% of the site would be covered by structures; the addition of impervious paving would increase the impervious coverage to about 78% (buildings and impervious paving). Landscaping/open space/pervious paving would cover about 22% of site.

13-2 Project Description (Street Layout)

Comment regarding project design and street layout is noted. The commenter does not raise an environmental issue and therefore no response is necessary.

13-3 Project Description (Height Limit)

Comment regarding heights is noted. The commenter does not raise an environmental issue and therefore no response is necessary.

13-4 Aesthetics – Project Description (Solar)

Comment is noted. As noted on page 3-7, the proposed project has been selected and enrolled as a LEED Neighborhood pilot project. The proposed project would maximize the use of renewable energy sources, energy efficiency and passive solar design measures. According to the design guidelines, individual owners will have the opportunity to tailor the design to meet their unique program requirements through building orientation, landscape treatment, building height, and building materials.

13-5 Solar Exposure/Global Warming

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

13-6 Project Comment

Comment noted. The commenter does not raise a specific environmental issue and therefore no response is necessary.

April 27, 2008

To: Sandy Brown
City of Santa Cruz
Planning and Community Development Department
809 Center Street, Room 206 (Monday–Friday 7:30 a.m. to 12:00 noon)
Santa Cruz, California 95060

From: Renée Flower
1747 King Street
Santa Cruz, California 95060

RE: Comments to the Draft EIR for 2120 Delaware Mixed Use Project

SCH #: 2007012097
Lead Agency: City of Santa Cruz

Dear Sandy Brown,

Thank you for the opportunity to comment on the Draft EIR for the 2120 Delaware Mixed Use Project. My comments, below, are interspersed with excerpts from the project DEIR and other sources.

Sincerely,

To begin, I want to point out that Bowman & William's (B&W) "Preliminary Hydrology and Stormwater Detention Volume Calculations" (2006, DEIR appendices) includes an interesting editorial comment. I strongly disagree with B&W's characterization of this creek channel as a "drainage ditch":

> "The drainage channel is so called Arroyo Seco Creek, and was recently realigned to its current location from the subject property. The drainage ditch has been constructed to mimic a natural drainage course, and has rock check dams in the flowline, and vegetation in the bottom of the channel and on the sideslopes of the channel." [1]

[1] In DEIR Appendices, see: "Preliminary Hydrology and Stormwater Detention Volume Calculations for the proposed Delaware Addition Subdivision, Prepared for RTP Delaware Ave., LLC," March 30, 2006, page 1. According to the channel relocation blueprints in my possession, the Arroyo Seco Creek relocation and restoration plans were designed by Swanson Hydrology and Geomorphology and Robert L. DeWitt & Associates, Inc. using as a reference a "Limited Geotechnical Investigation" performed by Haro, Kasunich, & Associates, Inc. Wetlands Research Associates, Inc., designed the creek restoration landscape plans and Dickson Design produced the landscape irrigation plans. Patricia Anderson of the California Department of Fish and Game, Monterey office, oversaw the creek relocation and restoration project.

The 2006 B&W report states that stormwater from the proposed development will be "collected in closed conduit systems and discharged to the drainage channel in two locations." In addition, the report argues that the site's soils preclude the used of pervious pavement, infiltration trenches, and bioswales that would allow runoff to infiltrate back into the soil. Instead of using these kinds of stormwater mitigations, the report recommends using subsurface manifold detention systems (a system of underground pipes) to retain runoff, and prefabricated "Vortechs" units to capture trash, oil, silt, and other debris in the runoff prior to discharge into the drainage channel. B&W calculates that the use of engineered subsurface detention manifolds will ensure that runoff from the site will be maintained at predevelopment release rates, and the prefabricated water quality "Vortechs" units, which require inspection and maintenance at regular intervals, will protect the channel from pollutants. [2] The project DEIR Hydrology and Water Quality mitigation measure 4.4-2a (DEIR page 2-7) describes the requirements related to the maintenance of the "Vortechs" water quality units.
Comment: Please see my comments below that are related to my conversations with Patricia Anderson.

A memo dated March 29, 2007, from Robert V. Henry P.E. of Bowman & Williams Consulting Civil Engineers to Mr. Craig French of Redtree Properties, discusses the existing hydrologic and hydraulic calculations performed by Bowman & Williams in 1987, and drainage calculation performed in 1998 and 1999. This memo includes a discussion of the undersized culvert under Delaware Avenue, and the channel's apparent capacity to accommodate stormwater runoff from the project site. Bowman and Williams suggests "utilizing the channel for a portion of the detention requirements associated with the current proposed project."
Comment: While the DEIR does not appear to discuss the possibility of instream detention of stormwater runoff from the site, the engineer's references to this possibility along with their stated position that the creek is a "ditch," presents cause for concern that the integrity of the relocated and restored creek could be compromised in the future.

Another memo, dated May 21, 2007, from Bowman & Williams to Mr. French (DEIR appendices), discusses the construction in the initial phases of the project of one or more below-grade curtain drains (subsurface drains constructed of rock, perforated pipe, and filter fabric) to intercept groundwater at the site and redirect the flow to Arroyo Seco Creek. These drains are necessary to alleviate the potential for liquefaction and to create more favorable conditions for site grading and related soil compaction. A memo dated November 1, 2007 (DEIR appendices), continues the discussion of curtain drains at the site and states that the curtain drain "system will be left in place, thereby alleviating long term concerns as well." This memo also mentions the timing of the construction of outfall pipes into the creek with the construction of a "riparian trail." The project DEIR, Geology and Soils mitigation measure 4.2-1b (DEIR page 2-7) requires the "installation of a curtain drain along the northern boundary of the site to intercept groundwater to a depth of ten feet and provide favorable conditions for site grading."
Comments: The description of the function of the curtain drains leads me to understand that these structures introduce intercepted and redirected groundwater into the creek channel. This is an additional flow into the channel, just as runoff from new development contributes additional flows of stormwater to the creek. DEIR Impact 4.4-3 states: "the proposed project would divert groundwater along the northern boundary of the site to Arroyo Seco Creek. This would not exceed the capacity of Arroyo Seco Creek nor result in substantial flooding offsite." Has the volume of redirected groundwater been taken into consideration in the stormwater runoff calculations? What impacts will this redirected stormwater have, if any, on the creek? Will the creek's relocated and restored channel be altered in any way to accommodate the curtain drains and the redirected flows of groundwater? Are there any other impacts related to the

[2] In DEIR Appendices, see: "Memorandum: Delaware Mixed Use Project EIR – Hydrology – Drainage Evaluation," from Brian Brown to Justin Meek, dated November 5, 2007.

redirection of groundwater at this site? For example, will the redirection of groundwater affect any deep-rooted plants on nearby properties, or the planned landscaping for the proposed project?

The Project DEIR discusses the proposed project's encroachments into the development setbacks for Reaches 3 and 4 of Arroyo Seco Creek (Impact 4.8-1, page 4-108). The mitigation proposed for this impact requires the project applicant to modify the site plan to eliminate parking and building areas that encroach into the 70- and 80-foot development setbacks (as required by the *City-wide Creeks and Wetlands Management Plan*). The DEIR's discussion of impact 4.8-2 (proposed drainage improvements, trail construction, and landscaping impacts to Arroyo Seco Creek riparian habitat) describes the water quality impacts related to urban runoff, and construction of stormwater discharge pipes. This section of the DEIR also discusses a gravel trail proposed to be constructed within the development setback and the introduction of human activity into this area. Numerous mitigation measures are proposed to reduce the level of significance of these impacts.
Comment: See comments below related to conversations with Patricia Anderson of the CDFG.

The interrelationships between the creek restoration/relocation project as approved by the CCC and CDFG in 2000, the City of Santa Cruz *Creeks and Wetlands Management Plan*, and the existing LCP policies that protect the reach of Arroyo Seco Creek near the boundary of 2120 Delaware Avenue are not entirely clear to me. On page 13 of the Coastal Commission's "Appeal A-3-STC-00-041 Staff Report—Arroyo Seco Creek Relocation & Restoration," the special conditions for the approval of coastal permit A-3-STC-00-041 for the relocation and restoration of this creek state: "Approval of coastal permit ... does not allow any future encroachment within 100 feet of the centerline of the restored stream."
Comments: Do the development setbacks contained within the *Creeks and Wetlands Management Plan* for the reaches of the creek impacted by the project alter the original terms of the permit? I assume that the development setbacks for Arroyo Seco Creek that are set out in the *Creeks and Wetlands Management Plan,* adopted by the City Council on February 28, 2006 and certified as a LCP amendment by the California Coastal Commission (CCC) in October 2007, replace the 100-foot setback required by the permit. The permit for the relocation and restoration of Arroyo Seco Creek established 100-foot development setbacks for the creek and these setbacks were part of the relocation plans. Will these be respected and maintained? It is my understanding that these 100-foot setbacks are part of the creek restoration design and are important to the creek's long-term health.

The Special Conditions enumerated on page 13 of the Coastal Commission's "Appeal A-3-STC-00-041 Staff Report—Arroyo Seco Creek Relocation & Restoration," include the incorporation of recommendations by the CDFG. In relation to these CDFG recommendations, I have the following concerns and comments:

Comments: According to my notes from a phone conversation with Patricia Anderson of the CDFG on 8/15/2000, Ms. Anderson said that the creek relocation and restoration plans were designed to handle current flood flows only, and not additional runoff from development of the adjacent site on Delaware Avenue. She also mentioned that future development of the site would require a separate storm water facility to accommodate runoff, and that runoff from future development should not be directed to the creek. In a letter dated 9/6/2000, Ms. Anderson informed Mr. Bruce Edelson, P.E., that:

> "The realigned stream requires protection in perpetuity. This can be accomplished either through dedication of a conservation easement or a deed restriction on property. One way to provide long term protection of the riparian vegetation at the

top of the streambank is to install wooden fence posts with cable stretched between the posts." [3]

A split-rail fence that was installed at the site along the 100-foot setback boundary is still on the site. However, after reviewing the site plan in the Initial Study for the project currently proposed for the site, it appears that the split-rail fence will be removed. Also, I understand that the proposed development will use the creek for storm water drainage. These alterations to the creek's relocation and restoration as overseen by the CDFG do not respect past mitigations.

Comments: In a conversation with Patricia Anderson on August 11, 2007, Ms. Anderson told me that the existing split-rail fence and the original 100-foot buffer mitigations must be respected, and that the developer must push the project back away from the fence. She said that the developer must demonstrate that the stormwater runoff from the site will not be greater than current flows. There can be no increase in runoff amount. Is it possible to direct additional flows of stormwater to the creek without increasing existing flows? She also expressed serious concern about the use of engineered subsurface water quality tanks like the Vortechs units proposed in the DEIR. She told me that urban stormwater runoff must be "polished", or cleansed, in a constructed wetland prior to drainage into the creek. While she understood the usefulness of engineered units to regulate flowrate, she was concerned that these units would not adequately cleanse the water. In addition, she was concerned that the units might not receive proper maintenance. Future activities on the site are unknown and this presents additional concerns about water quality impacts.

Comment: Given that the permit to relocate and restore Arroyo Seco Creek incorporated the requirements of the CDFG, why isn't this agency included in the DEIR's references under "other state and local agencies" on DEIR page 6-5? City of Santa Cruz LCP Policy 2.3.1.9 states: "Coordinate with the Department of Fish and Game to assure that development that involves alteration of or discharge into wetlands or streams and riparian vegetation is reviewed by the Department and their recommendations incorporated into project plans prior to approval of the coastal development permits." Does this project require a coastal development permit to construct drains into the creek channel, redirect groundwater to the creek channel, construct a gravel path within the development setback, and plant new landscaping within the creek's development setback? Given that the relocation and restoration of Arroyo Seco Creek required a coastal development permit, would the proposed project's encroachments into the creek and its buffer areas also require such a permit?

Comment: During a presentation about the proposed project, the developer and his architect stated that the creek is not located on the property to be developed. It is my understanding that the entity known as Arroyo Seco Creek includes the lands that extend outward from its banks: a creek is much more than just its channel. The creek's channel is not located on the development site, but clearly, the proposed project will have multiple impacts on the creek.

Attachments:
Letter from Patricia Anderson, CDFG, to Mr. Bruce Edelson, P.E., dated September 6, 2000.

[3] See attached photocopy of letter from Patricia Anderson, CDFG, to Mr. Bruce Edelson, P.E., dated September 6, 2000.

State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov

GRAY DAVIS, Governor

September 6, 2000

Mr. Bruce Edelson, P.E.
28520 Meadowmist Dr.
Rancho Palos Verdes, CA 90275

Dear Mr. Edelson,

Conopco (dba Lipton, Santa Cruz County, Notification # R3-2000-0237)

This letter responds to your request for written information from the Department of Fish and Game (Department) regarding requirements to complete subject streambed alteration permit process. Project proposes to realign Arroyo Seco Creek to create more useable space for development and to restore degraded creek habitat. Creek was previously channelized to act as a detention basin, to accommodate development, and has been continually degraded through spraying of herbicide on riparian vegetation. The Department will be working with the City of Santa Cruz and Caltrans on alternatives to using creeks as detention basins. Although the proposed project will increase habitat values from existing conditions, there are several things which must be completed before the Department can permit this project. The following provides guidance for completion of permitting process:

1. A qualified fluvial geomorphologist must review project. Review will provide design criteria to incorporate, as much as possible, pool habitat and a low flow channel meander into design. This will mitigate for the loss of stream length through creating greater complexity and diversity in stream channel and will recreate loss of important existing pool habitat.

2. The fluvial geomorphologist will assist with incorporating the increase in riparian width into the design. The riparian setback requirement is 100 ft. from center of stream, therefore 200 ft. is now available for designing the new channel (City of Santa Cruz ordinance and Ca. Coastal Commission). A wider riparian buffer at the top of the bank is preferred unless review of stream hydrology shows that the width provides more habitat value within the streambanks. The goal is to create a microclimate that helps retain the pool habitat longer, thus increasing habitat values.

3. The fluvial geomorphologist will assist in determining whether bioengineering can be used as a practical alternative to "hard" engineering solutions (ie. gabions) for predetermined erosion problems and grade control. If not, gabions and rip-rap must be planted with local, native riparian vegetation such as willows.

4. The project will be required to be monitored until the project is successful. Hopefully, revegetation efforts and streambank stabilization efforts will be successful after 5 years or less. All non-native invasive plant species will need to be removed from the restoration area and replaced with native riparian vegetation, unless already specified in revegetation plan.

5. The realigned stream requires protection in perpetuity. This can be accomplished either through dedication of a conservation easement or a deed restriction on property. One way to provide long term protection of the riparian vegetation at the top of the streambank is to install wooden fence posts with cable stretched between the posts.

6. Submit a detailed plan of channel design to the Department of Fish and Game for approval. Our understanding is that you plan on constructing this project during the drier months of 2001.

If you have any questions or require further assistance, please contact me at (831) 724-7130.

Sincerely,

Patricia Anderson

Patricia Anderson
Associate Fishery Biologist
Central Coast Region

Response to Comment Letter # 14
Renee Flower
April 27, 2008

14-1 Hydrology and Water Quality – Creek Characterization

Comment regarding disagreement with reference to Arroyo Seco Creek as a drainage ditch in the hydrology report is noted. The Draft EIR references the creek as a watercourse, consistent with the *City-wide Creeks and Wetlands Management Plan*.

14-2 Hydrology and Water Quality – General

Comment describes the project water quality system, but does not make a specific comment on the DEIR analyses.

14-3 Hydrology and Water Quality – Creek Impacts

The impacts of project stormwater runoff into Arroyo Seco Creek are addressed in the Draft EIR on pages 4-48 to 4-50. The analysis concludes that the creek has capacity to accommodate project runoff. Other analyses and measures are included to address water quality and riparian setbacks. Therefore, the integrity of the relocated creek will not be compromised.

14-4 Hydrology and Water Quality – Additional Creek Flow

Flows from the curtain drains are expected to be highly variable in response to seasonal groundwater variations and individual storms. Unknown factors would control how much flow would be intercepted by the northern drain and how much would remain in the ground to be intercepted by the southern drain. Though there are uncertainties in the discharge rates from the curtain drains, it is expected that these flows would be on the order of a few hundredths of a cubic foot per second and, therefore, would not be expected to be significant to either erosion or flood potential along the creek.

14-5 Hydrology and Water Quality –Curtain Drain Impacts to Creek

As described on page 3-18 of the Draft EIR, installation of the proposed drainage outlets into Arroyo Seco Creek would require disturbance to the channel banks during construction. These facilities have not been designed, but will require approval of a Streambed Alteration Agreement with the Department of Fish & Game. Additionally, the discharge will require approval by the Regional Water Quality Control Board.

14-6 Hydrology and Water Quality –Curtain Drain Impacts to Surrounding Vegetation

Response to Comment 14-4 addresses the proposed curtain drains at the project site in order to reduce high groundwater levels. The southern curtain drain would discharge into the southern storm drainage system and would not require an additional outfall into the creek. Flows to the Arroyo Seco Creek would be on the order of a few hundredths of a cubic foot per second and therefore would not be expected to be significant.

Landscaping on surrounding properties is limited. The majority of the vegetation within the vicinity of the proposed project is associated with the riparian zone of Arroyo Seco Creek and includes planted oak trees and willows, etc. The redirection of the groundwater flows would not affect the vegetation within the riparian corridor as the

flows to the creek would be minimal. Proposed landscaping on-site would not be affected with implementation of the curtain drains as the proposed project would likely include limited drip-irrigation.

14-7 Hydrology and Water Quality - General

Comment restates DEIR impact and mitigation findings regarding Arroyo Seco Creek and is so noted. No response is necessary.

14-8 Hydrology and Water Quality – Creek Development Setbacks

The Creeks and Wetlands Management Plan adopted by the City Council on February 28, 2006 and certified by the California Coastal Commission in spring 2008 supersedes the existing General Plan policy regarding a 100-foot setback and replaces the 100-foot setback requirement established in the coastal permit A-3-STC-00-041. Please see also Response to Comment 1-2.

14-9 Hydrology and Water Quality – Additional Creek Flows

Based on calculations from Bowman and Williams (March 29, 2007) the estimated flow capacity of Arroyo Seco Creek adjacent to the project site is 2,000 cubic feet per second (cfs), which far which far exceeds the amount required to convey upstream and project site drainage. For instance, during an unusually large rainstorm, such as a 100-year storm event, the peak estimated flow in the creek is only 310 to 375 cfs (Bowman & Williams, March 29, 2007).

Because the downstream 60-inch culvert can only accommodate approximately 195 cfs, stormwater would back up into the creek channel (north of Delaware Avenue and adjacent to the project site) during a large storm event such as a 100-year event. According to the project engineer, the channel is "over designed for flow conveyance for both the 10-year and 100-year events" and has approximately 24,500 cubic feet of water storage capacity (Bowman & Williams, March 29, 2007).[15] Therefore, flow in the channel is not anticipated to overtop its banks and the project site's drainage system would continue to discharge to the creek. In addition, since the culvert is undersized compared to the creek, it would act to regulate flow to the downstream drainage system, which in effect protects the downstream system from flooding during large storm events (Bowman & Williams, March 29, 2007).[16]

14-10 Hydrology and Water Quality – Stormwater Facilities

As described on page 4-46 of the DEIR and shown in Figure 4.4-4: Drainage Plan, runoff from impervious surfaces would be collected in several storm drains located within the right-of-way of the proposed private project roadways. This collected runoff would then be directed via storm drain pipelines that are 12- to 18-inches in diameter into a series of 36-inch storm-sewer detention manifolds that would provide underground storage and

---

[15] The estimated stormwater detention required within the creek under site development conditions is 22,558 cubic feet for a 100-year event.

[16] According to the City's Public Works Department, the culvert does not have a history of debris buildup at its upstream end on the north side of Delaware Avenue that would further impede flow.

control discharge of stormwater runoff into Arroyo Seco Creek at two locations. Each outfall pipe would have a discharge capacity of 16 cfs. The two proposed outfalls would incorporate energy dissipaters (i.e., angular rock rip-rap) to reduce the potential for erosion on the channel embankment.

Because the Arroyo Creek was determined to have adequate capacity to accommodate 10-year storm event flows (as described in comment 14-9) a separate storm water facility to accommodate runoff was not considered necessary.

14-11 Biological Resources – Creek Setbacks and Fencing

The split-rail fencing was a recommendation by DF&G as a means to "provide long term protection of the riparian vegetation at the top of the streambank"(letter from Patricia Anderson, Department of Fish & Game, September 6, 2000).

The comment by the DF&G was a suggestion only and was not a condition as part of the streambed alteration permit. There is no conclusive evidence to suggest that a wooden fence is effective in protecting riparian vegetation. The creek corridor is currently vegetated with willows, oaks, grasses, and other vegetation. Apart from the installation of the current drain(s) and stormwater outfalls, this vegetation would not be disturbed as part of construction and because stormwater flows from the project site would be controlled (see page 4-46 of the DEIR), vegetation would continue to exist within the creek corridor once the project is completed. The applicant has indicated that the existing fence will be relocated to the creek side of the new public access trail.

14-12 Hydrology and Water Quality – Additional Creek Flows

See Response to Comments 14-9 and 14-10 regarding the proposed stormwater system and flows into the creek.

14-13 Hydrology and Water Quality –Water Quality

See Response to Comment 2b-1 regarding engineering water treatment systems.

14-14 CDFG Coordination

A notice of preparation (NOP) about the project was sent to the California Department of Fish & Game (DF&G), Region 3, as part of the scoping process, however no comments were received. Furthermore, a copy of the Draft EIR was also sent to DF&G Region 3, and no comments were received. As indicated on pages 3-18 and 3-25, approval of a Streambed Alteration Agreement by DF&G will be required. City of Santa Cruz Planning Department staff also contacted DF&G during preparation of the EIR, but no comments were offered. The project also includes a Watercourse Development and Coastal Permits for construction of improvements adjacent to the creek.

14-15 Coastal Development Permit

As described on page 3-18 of the Draft EIR, installation of the proposed drainage outlets into Arroyo Seco Creek will likely require approval of Streambed Alteration Agreement with the DF&G. Additionally, because a portion of the project is located within the Coastal Zone, the project will also require a Coastal Permit from the City, which may be appealable to the Coastal Commission. See also comment 1-1 from the California Coastal Commission.

Additionally, as described in Impact 4.8-1 starting on page 4-108 of the Draft EIR, the project as currently proposed results in minor encroachments into the required development setbacks set forth in the adopted City-wide Creeks and Wetlands Management Plan. Mitigation 4.8-1a requires the project applicant to a revised site plan prior to approval of the Vesting Tentative Map that eliminates these encroachments.

14-16 Applicant's Presentation

Comment is noted. It is correct that the creek channel is not located on the project site except for a small portion in the northwestern corner of the site. Project impacts to the creek are addressed in section 4.8 of the DEIR.

From: **James Gill** <gill111@sbcglobal.net>
Date: 2008/4/16
Subject: 2120 Delaware
To: Sandy Brown <sandyjbrown@gmail.com>

Dear Sandy,

Thanks for copying the ESA by RTB for SCI for me (how's that for TLA's!). The VOC-contaminated ground water plume that it describes is non-trivial by Fed EPA standards, and quite shallow -- we neighbors had not known that before. This may not affect the 2120 project (indeed the project's curtain drain might even help to stabilize the plume), but I think it prudent to ask for a formal CRWQCB opinion. My letter is attached, copying you. Please add it to your public comment file.

I hope to submit another more general comment before the 4/30 deadline. I continue to be impressed by the DEIR and wish that I could have used in my UCSC course; congrats. One area for which I think that you under-estimated impact is Recreation, especially the nearby city park.

Cheers
-Jim

--
Sandy Brown, AICP
Contract Planner

City of Santa Cruz
Dept. of Planning & Community Development
809 Center Street, Room 206
Santa Cruz, CA 95060

(831) 588-8204 - Cell
(831) 420-5119 - Voice
(831) 420-5101 - Fax
sandyjbrown@gmail.com

111 John Street
Santa Cruz CA 95060

16 April 2008

Mr. Frank DeMarco
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place Suite 101
San Luis Obispo CA 93401-7906

Subjects:
(a) DEIR for Project at 2120 Delaware Street, Santa Cruz CA
(b) Groundwater Verification Monitoring at the Former Santa Cruz Industries (SCI) Site, 411 Swift Street, Santa Cruz CA (Case# S33)

Dear Mr. DeMarco,

I write because I assume that the CRWQB, as a Responsible Agency, will comment on the Draft EIR prepared by the City of Santa Cruz for a development project at 2120 Delaware Street in Santa Cruz. Comments are due by April 30, 2008.

The DEIR discusses a ground water monitoring program that is adjacent to the project site and overseen by the CRWQCB. It recommends that at least one monitoring well be destroyed under permit. I ask that you address two questions in this context. First, which wells can be destroyed without affecting the ongoing monitoring effort? Second, what will be the effects of the proposed project on the SCI ground water contamination plume, and vice versa?

I raise the first question because the most recent monitoring report on your web site is for the 4th Quarter 2006. It shows, for example, high VOC levels (e.g., PCE were > 13,000 ppb) in monitoring wells within 50' of the proposed site. In addition, TCE levels are 200 ppb off-site across the street from residences on Swift Street, and are ~10 ppb at the southernmost monitoring wells on the edge of public school property. USA EPA MCL's for TCE and PCE are 5, so the plume seems to be significant under CEQA. The contaminated water is very shallow (indeed the water table is at the surface during most winters) and lies across the street from residences that need to pump water from beneath their homes in the winter. Homeowners may, therefore, be pumping water that exceeds MCLs.

I raise the second question because the proposed project will install a curtain drain on its northern border that will interupt groundwater flow to a depth of 4-6 feet and divert it to the west. The contaminated water from the SCI site lies 2-10 feet below ground surface and is downstream from the proposed interuption. Please comment on how this change in ground water flow might affect the contamination plume with respect to the 2120 Delaware site, but also along Swift Street and the school property.

Finally, I note on your web site that the March 2007 report to you from RTB recommended installation of 17 vapor probes. Has this happened? If so, when will the results be available?

Please copy me on your official comment to the City about this project.

Sincerely

James Gill

Cc: City of Santa Cruz Planning and Community Development Dept.

Response to Comment Letter # 15
James Gill
April 16, 2008

15-1 Hazardous Materials – Contaminated Water Plume

Please see Response to Comment 2a-1.

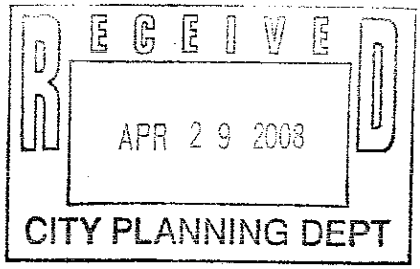
15-2 Public Service & Utilities – Recreation Impacts

Please see Master Response PSU-1 – Parks and Recreation.

James B & Catharine C Gill
111 John St
Santa Cruz CA 95060-6328

27 April 2008

Sandy Brown
Planning and Community Development Department
City of Santa Cruz
809 Center Street
Santa Cruz CA 95060



Re: 2120 Delaware Development Project

Dear Sandy

Congratulations to you and Redtree Properties for a well-prepared and thorough DEIR. If all the proposed mitigations and conditions are adopted, then development will be environmentally responsible. Otherwise there would be more objections. I have four additional comments.

1. The project requests approval for potentially quite dense development. It is unclear to me why Alternative One (Reduced Density) is not environmentally superior because it meets all the project's objectives, would reduce the Level of Significance for parking and riparian setback to No Impact, and would reduce the severity of other impacts. Some of these benefits accrue if even one or two of the 20 parcels were left as internal open space.

2. I believe that the DEIR does not adequately assess Parks and Recreation in Section 4.5.1 (pages 4-72,73), perhaps because it got over-whelmed by issues related to water supply in the Public Services and Utilities section. The DEIR correctly recognizes that the Lower Westside already is deficient in parkland relative to General Plan requirements. Any substantially increased use will, therefore, be significant under CEQA. The project is said to have a Less Than Significant effect because few school age children are likely to live there, and the adult residents would use State Parks like Natural Bridges and Wilder Ranch instead. The latter is highly unrealistic. The residents are likely to be young adults, many with dogs. This age group uses public parks, including adjacent Derby Park, for jogging, tennis, frisbee, baseball, basketball, etc. Whatever facilities exist in nearby City parks are used by young adults as much as or more than by children. Why would the occupants of 160-250 residential units at 2120 Delaware, and employees who are there mid-day, be different? I contend that, had this impact been assessed by surveying current and projected use, the analysis would have shown that use of Derby Park could double.

I recommend one of two mitigations for this impact. First, require that one of the 20 possible development parcels be left as open space and used for on-site outdoor recreational facilities such as exercise bars, basketball half-court, volleyball, petanque pitch, etc. Although this might reduce revenue potential by 5%, it would also add amenities, reduce environmental impacts such as parking, and reduce impact on Derby Park. Alternatively, allow the developer to make those kind of improvements at Derby Park in lieu of the park fee.

3. The Hazardous Materials section 4.3 does not analyze the effect of the project on the shallow ground water contamination plume adjacent to the site on the southeast, extending from the former SCI property at the corner of Swift and Delaware at least as far south as the Santa City School District property at 313 Swift Street. Instead it relies on an a theoretically on-going monitoring program by the California Regional Water Quality Control Board to conclude that the effect is Less than Significant. Please see my attached April 16, 2008 letter to that agency about this topic. Specifically, I ask that the FEIR answer the two questions posed in that letter: which monitoring wells can be destroyed without affecting the on-going monitoring effort? what will be the effects of the proposed project on the SCI ground water contamination plume, and vice versa? A thoughtful reply from the CRWQCB could be a sufficient answer without additional ground water studies as long as the agency has good reasons to agree that the effects are insignificant to both the project and the adjacent neighborhood.

4. Two traffic-related effects can be mitigated further with minimal cost to the project. First, construction-related truck traffic should be banned from Swift Street, especially before 8:00 AM. The trucks can, instead, use Swanton-Delaware where there are no residences. Second, the FEIR should not include the option of unloading delivery trucks on Delaware with flaggers. Project approval should be conditioned on redesign to accommodate trucks >40'. The first Recommended Condition of Approval on page 4-69 implies that such re-design is optional. It should not be optional because on-street unloading is unsightly, interferes with the bicycle lane, and adds to congestion and even danger. The DEIR recognizes the problem but seems to allow the option. The FEIR and neighborhood would be better without it.

Sincerely

James Gill
111 John Street
Santa Cruz CA 95060

1 attachment

111 John Street
Santa Cruz CA 05060

16 April 2008

Mr. Frank DeMarco
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place Suite 101
San Luis Obispo CA 93401-7906

Subjects:
(a) DEIR for Project at 2120 Delaware Street, Santa Cruz CA
(b) Groundwater Verification Monitoring at the Former Santa Cruz Industries (SCI) Site, 411 Swift Street, Santa Cruz CA (Case# S33)

Dear Mr. DeMarco,

I write because I assume that the CRWQB, as a Responsible Agency, will comment on the Draft EIR prepared by the City of Santa Cruz for a development project at 2120 Delaware Street in Santa Cruz. Comments are due by April 30, 2008.

The DEIR discusses a ground water monitoring program that is adjacent to the project site and overseen by the CRWQCB. It recommends that at least one monitoring well be destroyed under permit. I ask that you address two questions in this context. First, which wells can be destroyed without affecting the ongoing monitoring effort? Second, what will be the effects of the proposed project on the SCI ground water contamination plume, and vice versa?

I raise the first question because the most recent monitoring report on your web site is for the 4th Quarter 2006. It shows, for example, high VOC levels (e.g., PCE were > 13,000 ppb) in monitoring wells within 50' of the proposed site. In addition, TCE levels are 200 ppb off-site across the street from residences on Swift Street, and are ~10 ppb at the southernmost monitoring wells on the edge of public school property. USA EPA MCL's for TCE and PCE are 5 ppb for TCE and PCE, so the plume seems to be significant under CEQA. The contaminated water is very shallow (indeed the water table is at the surface during most winters) and lies across the street from residences that need to pump water from beneath their homes in the winter. Homeowners may, therefore, be pumping water that exceeds MCLs.

I raise the second question because the proposed project will install a curtain drain on its northern border that will interupt groundwater flow to a depth of 4-6 feet and divert it to the west. The contaminated water from the SCI site lies 2-10 feet below ground surface and is downstream from the proposed interuption. Please comment on how this change in ground water flow might affect the contamination plume with respect to the 2120 Delaware site, but also along Swift Street and the school property.

Finally, I note on your web site that the March 2007 report to you from RTB recommended installation of 17 vapor probes. Has this happened? If so, when will the results be available?

Please copy me on your official comment to the City about this project.

Sincerely

James Gill

Cc: City of Santa Cruz Planning and Community Development Dept.

Response to Comment Letter # 16
James B. and Catharine C Gill
April 27, 2008

16-1 General Statement – DEIR and Project Support

Comment indicates that if proposed mitigations and conditions are adopted, the development will be environmentally responsible and is noted.

16-2 Alternatives – Alternative 1 as a Superior Alternative

While Alternative 1 would reduce impacts as compared to the proposed project, Alternative 3 was determined to result in the least impacts, as it would generate fewer daily trips (thereby minimizing impacts to air quality and traffic) and would require least amount of parking. As such, Alternative 3 was considered to be the environmentally superior alternative.

Please see Master Response ALT-1 – Alternatives.

16-3 Public Service & Utilities – Recreation Impacts

Please see Master Response PSU-1 – Parks and Recreation.

16-4 Public Service & Utilities – Recreation MM Suggestion

For reasons outlined under the analysis for Impact 4.6-2 of the DEIR, as well as in Master Response PSU-1, impacts upon recreational facilities are considered to be less-than-significant, therefore mitigation is not required.

16-5 Hazardous Materials – Contaminated Water Plume

Please see Response to Comment 2a-1.

16-6 Hazardous Materials – Monitoring Wells

The monitoring well identified as MW-1, located along the property boundary with the Eklof-former SCI solvent-release site, is associated with the ongoing groundwater monitoring of the solvents plume at the adjacent Eklof property. Because it is on the adjacent Eklof property, this well would not be disturbed by proposed construction activities and would remain an active part of the groundwater monitoring network for the adjacent Eklof solvent-release site.

The 2004 Phase I ESA completed for the site (by RTD, Inc.) refers to another monitoring well on the project site (MW-4), which is a remnant from a group of shallow wells installed during a 1996 soil and groundwater investigation performed by Steven Raas and Associates (RTD, Inc. 2004). This MW-4 well, and any other missing monitoring wells from this 1996 investigation, are considered to be abandoned. Any old, unused wells are considered to be potential conduits for contaminants to access shallow groundwater, and should be properly sealed and destroyed.

16-7 Hazardous Materials – Contaminated Water Plume

See Response to Comment 2a-1.

16-8 Transportation and Traffic – Construction Traffic Mitigation Measure

Comment regarding the suggested construction-related truck traffic is noted and referred to City staff and decision makers for further consideration.

16-9 Transportation and Traffic – Delaware Unloading

The recommended condition of approval does require site plan modification to accommodate onsite loading and not on-street loading. The use of flaggers would be only to assist and direct trucks backing into or out of the project site.

Sandy Brown <sandyjbrown@gmail.com>

Just say "NO"

2 messages

Kathy Haber <dannynor@cruzio.com> **21 March 2008 12:20**
To: sandyjbrown@gmail.com
Cc: smccord@santacruzsentinel.com

Hello Ms Brown,

I am writing in regard to the development on Delaware Ave proposed by Redtree Properties. I simply do not understand how you can even consider approving this large development since THERE IS NO WATER available to service it! In today's paper there is an article about the experimental desal plant starting up at the UCSC controlled Long Marine Lab. Any water provided by this process will be extremely expensive! Everyone in Santa Cruz will see their water rates, which are already high and planned to rise even more in the next few years, climb precipitously. I wonder if this is covered in the EIR?

Monterey is currently grappling with this problem. They seem to have looked into the rosy future of Desal to solve the very natural problem of water supply controlling growth. When they discovered the true cost to everyone in the water district, they were forced to reconsider.

I suspect the construction of a large desal plant here might become the subject of a protracted court battle. I would personally contribute to a legal fund to stop it.

The Planning Department is supposed to look into the future to guide what is the best for all the citizens of their district, not just to provide profit opportunities for developers. Please vote against this proposal.

Kathy Haber
114 Shelter Lagoon DR, SC

Sandy Brown <sandyjbrown@gmail.com> **21 March 2008 12:56**
To: Kathy Haber <dannynor@cruzio.com>

Kathy,
I will forward your comments on to our environmental consultants as part of the EIR comment process. You can look on the city's website (www.ci.santa-cruz.ca.us) to find out more about the project and to review the environmental document for yourself.
If you have further questions after reviewing the website, please feel free to contact me again.
I hope this information was of help.
Sincerely,
Sandy Brown
[Quoted text hidden]

--
Sandy Brown, AICP
Contract Planner

City of Santa Cruz
Dept. of Planning & Community Development
809 Center Street, Room 206
Santa Cruz, CA 95060

(831) 588-8204 - Cell
(831) 420-5119 - Voice
(831) 420-5101 - Fax
sandyjbrown@gmail.com

Response to Comment Letter # 17
Kathy Haber
March 21, 2008

17-1 Water Supply – Lack of Supplies

Comment indicates that there is no water available to serve the project. See Master Response WS-1 – Water Supply.

17-2 Water Supply- Desalination

Comment asks whether the issue of increased water rates to build a desalination plant was considered in the EIR. Economic impacts are not required to be considered under CEQA, and thus future costs of a desalination plant and funding sources are not addressed in the DEIR.

17-3 General Statement – Project Position

Comment opposes construction of a large desal plant and the proposed project, but comment does not address analyses included in the DEIR. Comment is noted and referred to City staff and decision makers for further consideration.

April 27, 2008

City of Santa Cruz Planning and Community Development Department
809 Center Street, Room 107
Santa Cruz, CA 95060

Dear Ms. Sandy Brown,

I am submitting the following comments on the Draft Environmental Impact Report ("DEIR") for the 2120 Delaware Avenue Redtree Properties project.

1. The objective of planning is to accommodate citizens' needs and pay for social and economic necessities by optimizing City revenues. Since City revenue is higher in industrial areas and less or a negative in residential areas why allow housing in an industrially–zoned area when the City's housing needs can be met in other residentially–zoned areas?

2. At full build out, the project residents and visitors may include infants, children, young active adults, and physically challenged people who will require more stringent safety measures than the average adult. How can the conclusion that the "project proposed onsite circulation and access.... would not result in unsafe conditions" be correct when the composition of future residents and workers on the site is unknowable? 4.5-4, p2-12

3. Why the conclusions of 4.6-1 and 4.6-2 (pp2-12, 2-13) of no significant impacts on schools and recreational facilities when on page 17 of Initial Study in Appendices, #12 a and #13 c & d (p17) conclude that the project would "induce substantial population growth"? Won't this growth potentially impact schools, parks and the physical deterioration of recreational facilities (4.6-1)? Given that the DEIR considers offsite impacts of traffic, why does it ignore the offsite impacts to the City of public services and utilities, park space and recreational facilities?

4. Given that all buildings in the immediate vicinity and surrounding neighborhoods are 1 and 2 stories, how can 4.7-1 conclude that the proposed project's 26 buildings "are generally similar in design and massing" to buildings in the immediate vicinity given a 20 acre project of 84 units and 26 buildings with 4+ stories of 55 ½ feet roof peaks? How can such a massive project not degrade the existing character of the area?

5. Since the final composition of the built out project cannot be determined as to types of businesses and their vehicle needs, materials usages and productions techniques, how can 2.4-4 conclude No Impacts as to Air Quality, Hydrology and Water Quality? (p 2-14)

6. Given there are only 2 small plazas planned, one of which will be used for parking at peak business hours, why are Parkland/Open Space in-lieu fees being considered given the inadequacy of residential recreational space for the projected numbers of project residents which may include children?

7. Given the project's adherence to LEED guidelines in order to be a "Green project", why are the buildings situated on an East / West grid instead of a North / South grid which would maximize solar benefits?

8. Why were the views from the residential areas on the hills above Mission Blvd. not considered as to the detrimental visibility of this relatively massive 20 acre site with roof peaks of 55 ½ feet? 4.7.1 (p 4-100)

Thank you,

Ruth Hunter
3305 Delaware Ave.

Response to Comment Letter # 18
Ruth Hunter
April 27, 2008

18-1 General Statement – Residential vs. Industrial Uses

Comment questions why allow housing in an industrially-zoned area, and does not comment on analyses in the DEIR. Comment is noted and referred to City staff and decision makers for further consideration.

18-2 Transportation and Traffic – Safety and Access

Access to the project site would be provided via four private roadways off of Delaware Avenue. Service and delivery trucks would likely use Hard Road and High Road, given their proximity to load access points. The other roadways, as well as the two pedestrian lanes would likely be used by cars, bicyclists, and pedestrians. Because of the relatively dense design and the fact that the roadways are fairly narrow, vehicle traffic will have to drive very slowly throughout the project site. As such, on-site circulation was determined to be safe for residents and users alike.

18-3 Public Service & Utilities – Recreation and School Impacts

As discussed in the Draft EIR Public Service and Utilities section Impact 4.6-2, the proposed project would result in an increase of 372 new city residents, if the residential component of the project would be maximized. The Initial Study identifies potential impacts related to growth which are addressed in section 5.2 of the DEIR. This section identifies potential population and employment growth with a slightly higher population estimate based on conservative average household sizes in the area. Given the relatively small size of units planned for the project site, it is anticipated that most of the residents would be adults and only 42 school-age children are projected to live in the residential units. Project impacts to school facilities are discussed on pages 4-87 and 4-88 of the Draft EIR. See also Response to Comment 7-6.

Please also see Master Responses PSU-1 – Parks and Recreation regarding impacts to parks and recreational facilities.

Impacts related to public services and utilities not discussed in the Draft EIR were addressed in the Initial Study and determined to be less than significant or no impact. The Initial Study is included as Appendix A of the Draft EIR.

18-4 Aesthetics – Visual Character

The project site is located within an industrial zone where there is an existing mix of building designs, heights, and massing. Although the proposed project would result in the construction of 26 buildings with four stories of 55.5 feet roof peaks, the proposed project design would be consistent with building size, types, and designs typical of an industrial zone, and would not substantially degrade the existing visual character of the area or result in significant aesthetic impact. Further, the overall height of the buildings would not exceed that which is allowed in the underlying zoning district.

18-5 Impact Determination

As discussed in CEQA Guidelines Section 15128, an EIR has to contain a statement briefly indicating the reasons for which various possible significant impacts of a project were determined not to be significant and therefore not discussed in detail in the EIR. The CEQA Guidelines allow for such statement to be contained in an Initial Study.

The Draft EIR subsection 2.4.4: No Impacts, contains a list of environmental issues for which the City determined that the proposed project would have no impact. This determination was achieved through the Initial Study and the Notice of Preparation process. The Initial Study (included as Appendix A of the Draft EIR) provides the brief statement indicating the reasons for which various significant impacts were determined not to be significant.

The Air Quality impacts that are listed in the No Impact category refer to potential impact related to objectionable odors. As stated in the Initial Study, the proposed project doesn't include future use that could result in generation of odors.

Similarly, the Initial Study determined that there would be no impact related to violating water quality standards, depleting groundwater supplies, housing on flood hazard boundary, flood-hazard area to impede flood flows, exposing people or structures to flooding, and inundation by seiche, tsunami, or mudflow. There are no impacts to groundwater as the site does not support groundwater supplies for private or domestic water supply. Similarly, the site is not within a location subject to flooding, seiche, tsunami or mudflow. Although, water quality was identified in the Initial Study as related to regulated discharge, the DEIR includes an analysis of project impacts upon surface water quality.

18-6 Public Service & Utilities – Recreation Impacts

Please see Master Response PSU-1 – Parks and Recreation.

18-7 Solar Exposure

The comment notes that the buildings are not oriented to maximize solar benefits. The comment is noted and referred to the City staff and decision makers for further review.

18-8 Aesthetics – Private Views

Aesthetic impacts are evaluated from public viewpoints/viewsheds (e.g. scenic roadways and or vistas, public parks, etc.). Views from private residential areas are not evaluated in accordance with the City's General Plan and the CEQA Guidelines. Therefore, views from the residential areas above Mission Street were not evaluated in the Draft EIR.

Gmail by Google BETA

Sandy Brown <sandyjbrown@gmail.com>

2120 Delaware DEIR comments

2 messages

Bill Malone <billmalone@pacbell.net> **30 April 2008 10:45**
To: sandyjbrown@gmail.com

Sandy Brown
Contract Planner
City of Santa Cruz Planning and Community Development Department
809 Center Street, Room 107
Santa Cruz, CA 95060

Dear Ms. Brown,

I am submitting the following comments on the Draft Environmental Impact Report on the 2120 Delaware project;

Subject 1: Alternative Projects are inadequate.

This EIR is fatally flawed because it does not examine alternative projects that are significantly different than the Proposed Project. The Alternative Projects chosen in this EIR for comparison are too similar to the Proposed Project. This results in the environmental impacts of these Alternative Projects being very similar to those of the Proposed Project. This leads to the erroneous conclusion that the Proposed Project is acceptable because it is not much worse than any Alternative.

Alternative Projects should be examined that truly minimize, or better, eliminate the Proposed Project's negative environmental impacts. For example, Alternative Projects that (1) have zero parking deficiencies, (2) eliminate the significant unavoidable impact to water supply, (3) comply with underlying zoning densities, and/or (4) have significantly less density, eg 25% to 33% less dense that Proposed Project. These types of Alternative Projects would give Planners, City Council and the public some true alternatives to evaluate and compare.

This faulty logic of accepting the Proposed Project because it is not much worse that the Alternatives is found in several places:
Page 2-2. "None of the alternatives would eliminate the significant unavoidable impact to water supply."
Page 2-2. "...however, they (Alternative Projects) would not reduce the level of significance of the impact to a degree lesser than the proposed project with mitigation."
Page 5-54. "However, except for the significant project parking and riparian setback impacts that would be eliminated under all alternatives, none of the alternatives would reduce the level of significance of the impact to a degree lesser than the proposed project with mitigation. However, the overall level of severity for many impacts would be reduced."
Page 5-55. "Table 5-16: Impact Comparison of Alternatives Relative to the Proposed Project" implies that there is not much difference in the Proposed Project and Alternatives and concludes that there is "No change in the severity of impact".

It is not surprising that the authors of the EIR conclude that there is not much difference in the environmental impacts of the Project and Alternatives, since they created Alternatives that are very similar to the Project! The EIR must provide some true alternatives.

Subject 2: Parking Deficiencies must not be allowed.

Parking Deficiencies seems to be a euphemism for "We will not provide adequate parking".

The EIR is inconsistent or misleading on addressing parking deficiencies:
Page 3-11. "No on-street parking is proposed as part of the proposed project."
contradicts:
Page 5-54. Table 5-15: Alternatives and Proposed Project Land Use Summary shows the Proposed Project with a "Parking Deficiency" of 305 !!! Alternatives have less "Parking Deficiencies"

Parking Deficiencies for the Project and Alternatives should not be dismissed and off-site parking should not be allowed. The developer must provide adequate on-site parking -- perhaps build two multi-level parking structures on the perimeter of the property to park all cars plus space for visitors. Mitigation measures, such as 4.5-5a, calling for a study ("the project applicant shall provide funding to the City for preparation of an independent study to analyze actual parking conditions" Page 2-9) are inadequate and unacceptable.

Page 2-9. Impact 4.5-5: Parking demand for the proposed project would exceed the supply as shown on the project site plans.
Page 2-9. Implementation of Mitigation Measures 4.5-5a and 4.5-5b would reduce the project's impact to a less-than-significant level, and Mitigation Measure 4.5-2c could further help reduce parking demand.

Even with the current vacant lot on-street parking is full. The project must satisfy all parking requirement with on-site parking spaces. And, the structure for these required spaces must be in the project plan from the beginning.

Other questions/comments:

1. Why is there not adequate park space provided for the up to 372 new residents generated by this project? (page 2-13, impact 4-6-2) Since there is already a deficit in park space on the Westside, why is this worsening of the existing deficit called a "less than significant impact" in the DEIR? (page 4-72)

2. Since CEQA requires that a project be "compatible with the scale and visual character of a surrounding area" (page 4-100), how can this project with a maximum height of 55 ½ Feet and 4+ stories (page 4-98) be considered compatible with the surrounding area of 1 and 2 stories buildings? (4-7-1)

3. The impact of workers and their families moving to the area to occupy jobs on the project site is not included in the DEIR's consideration of impacts on parks and schools in the area. Why is this not considered in the DEIR?

--Bill Malone
519 Walnut Ave
Santa Cruz
420-1133
BillMalone@pacbell.net

Sandy Brown <sandyjbrown@gmail.com> **30 April 2008 12:16**
To: Bill Malone <billmalone@pacbell.net>

Bill,
I received your comments and will forward them onto the project EIR consultant's for their review as part of the EIR process.
Thank you for your time,
Sandy Brown

2008/4/30 Bill Malone <billmalone@pacbell.net>:
[Quoted text hidden]

--
Sandy Brown, AICP
Contract Planner

City of Santa Cruz
Dept. of Planning & Community Development
809 Center Street, Room 206
Santa Cruz, CA 95060

(831) 588-8204 - Cell
(831) 420-5119 - Voice
(831) 420-5101 - Fax
sandyjbrown@gmail.com

Response to Comment Letter # 19
Bill Malone
April 30, 2008

19-1 Alternatives – Range of Alternatives

Please see Master Response ALT-1 – Alternatives.

19-2 Transportation and Traffic – Parking Deficiencies

Implementation of Mitigation Measures 4.5-5a and 4.5-5b would reduce the project's parking impact to a less-than-significant level.

Please see Master Response T-1 – Parking Demand and Supply.

19-3 Public Service & Utilities – Recreation Impacts

Please see Master Response PSU-1 – Parks and Recreation.

19-4 Aesthetics – Neighborhood Compatibility

Comment is noted. See Response to Comment 18-4.

19-5 Public Service & Utilities – Secondary Growth Impacts

Potential secondary growth generated from new jobs created by the project is discussed on page 5-2 of the Draft EIR in the Growth Inducement section. This section notes that it is expected that most of the jobs generated onsite would be available to local workers. But as a worst case if all new jobs were filled by people moving to the area, the required housing could be met by the project site and other existing pending cumulative residential projects. The impacts on parks and schools related to cumulative development are addressed on pages 5-18 and 5-19 in the DEIR.

April 30, 2008

Sandy Brown
City of Santa Cruz Department of Planning and Community Development
809 Center Street Room 107
Santa Cruz CA 95060

Ms. Brown,

Issues of concern for me regarding the Draft Environmental Impact Report for the 2120 Delaware Avenue Project include:

Traffic impacts on the Westside. How can a moving target be adequately evaluated as the number and mix of commercial and residential and office are fluid numbers? What about cumulative impacts from the UCSC projects at Terrace Point that have not been built? Why didn't the EIR evaluate traffic impacts on Swift Street and Delaware at peak time use by Pacific Collegiate School and anticipate its future expansion? What about traffic impacts at other intersections on Swift Street?

Impacts on the Water System. Why wasn't a water supply assessment done? Will this entire project, if approved, have priority over other projects that follow even if the phase has not been approve? Can the Desalination plant be used to supply this project?

Thank you for your time and assistance.

Ron Pomerantz
215 Gharkey Street
Santa Cruz, CA 95060

Response to Comment Letter # 20
Ron Pomerantz
April 30, 2008

20-1 Transportation and Traffic –Impact Analysis

The proposed project transportation and traffic impacts related to trip generation and parking were analyzed based on the worst-case scenario. This worst-case scenario assumed the maximum range of development for research and development, office, and retail uses, which generate more average daily and peak hour trips, as compared to warehouse and light manufacturing (also see Table 4.5-2: Project Years 1-3 and Buildout Development Assumptions).

20-2 Transportation and Traffic – Cumulative Projects

As noted on page 5-3 of the Draft EIR, the projects included in the cumulative analysis include approved, pending, and known planned projects, as well as recently constructed projects that are now being occupied. The cumulative list also includes planned long-term projects, for which site plans are not currently prepared or submitted to the City. The cumulative projects list is presented on pages 5-4 through 5-6 of the Draft EIR. As noted on page 5-6, the Marine Sciences Campus located at Terrace Point is included as a long-term project at UCSC and was included in the cumulative traffic analysis.

20-3 Transportation and Traffic – Swift/Delaware/Pacific Collegiate School Impacts

While the proposed project would contribute additional new vehicular trips along Swift Street, the DEIR concluded that there would be no significant impacts to traffic along this segment of Swift Street. Swift Street is a collector street that accommodates both commercial and residential traffic. The traffic impact analysis concluded that there would be less than one percent of project-traffic traveling south on Swift Street toward West Cliff Drive in the vicinity of Pacific Collegiate School. See also Response to Comment 7-15.

20-4 Transportation and Traffic – Other Swift Intersections

The traffic impact analysis evaluated traffic impacts at the Swift Street/Mission Street and Swift Street/Delaware Avenue intersections. Due to the small percentage of traffic that is anticipated to travel down Swift Street to West Cliff Drive, no additional intersections were included in the traffic impact analysis for the proposed project.

20-5 Water Supply – Water Supply Assessment

Please see Master Response WS-1 – Water Supply.

20-6 Water Supply – Phasing/Priority

Please see Master Response WS-1 – Water Supply.

20-7 Water Supply – Desalination

Please see Master Response WS-1 – Water Supply.

Celia Scott, A.I.C.P.
ATTORNEY AT LAW
1520 Escalona Drive
Santa Cruz, California 95060
Telephone and FAX: 831·429·6166

April 30, 2008 Fax Transmission to 831-420-5101

Sandy Brown
Planning and Community Development
City of Santa Cruz
809 Center St., Room 107
Santa Cruz, CA 95060

Re: 2120 Delaware Mixed-Use Project
Draft Environmental Impact Report

Dear Ms. Brown:

I am submitting the following comments on the above-referenced Draft Environmental Impact Report (DEIR).

1. Global Climate Change (pp 5-7 through 5-14)

Although the DEIR provides a discussion of the scientific and regulatory background on Global climate change to date, the DEIR fails to provide an assessment of the 2120 Delaware project's potential greenhouse gas emissions in quantified terms, including a inventory of all the project's emission sources. Reference is made to "indirect emissions" of GHG emissions associated with the project, but that is not quantified either.

Therefore, there is no evidence to support the conclusion stated on p. 5-14 to the effect that "The proposed project's incremental effects would not be cumulatively considerable as the project is designed and will be built to reduce vehicle trips and emissions and incorporate green building design."

In fact, the analysis of alternatives to the project (pp. 5-31 ff) indicate that all of the alternatives generate fewer vehicle trips, among other things, than the proposed project; and that the environmentally superior alternative (without the PD modifications) involves a 43% reduction in vehicle trips.

Furthermore, there is no analysis at all in the DEIR of the project's energy consumption, as required by Public Resources Code §21100(b)3), which is intended to enhance energy conservation and reduce wasteful use of energy resources.

In short, the DEIR must include an inventory of both the project's direct and indirect emission sources for GHGs, in addition to vehicle trips generated by the project, such as: electricity and natural gas usage in buildings; water supply and transportation to the project;

operation of construction vehicles and machinery; manufacture and transport of building materials; waste disposal, including transport of solid waste and methane emissions from organic decomposition; fugitive emissions, such as methane leaks from pipeline systems and leaks of HFC's from air conditioning systems; in short, all possible GHG emissions associated with the construction and operation of the project, in all phases

As to methodologies for measuring a project's GHG emissions see The California Environmental Quality Act - On the Front Lines of California's Fight Against Global Warming, A Center for Biological Diversity Report, Appendix (attached). The document is available on line at www.biologicaldiversity. org.

With regard to the DEIR's conclusion that "an individual project typically does not generate enough greenhouse gas emissions to significantly influence global climate change", there is also no evidence to support that conclusion. On the contrary, the magnitude and scope of the climate change impacts facing California, the mandates of AB 32 and Executive Order S-3-05 support the conclusion that since GHGs must be reduced "any new emissions generated by a project should be considered cumulatively significant." (CBD Report, p. 8).

In the absence of a GHG emissions analysis, it is not possible to determine whether any mitigation measures for reducing such emissions are adequate or feasible. In fact, the DEIR proposes no mitigation measures since it simply assumes, without quantified evidence, that the project's emissions are not "cumulatively considerable." For example, a whole list of mitigation measures are set forth in CBD Report, p. 10-11, including photovoltaic solar energy arrays on buildings to meet energy needs, which does not appear to be part of the project.

In summary, although the proposed project claims to meet the project objective of a "compact design to reduce vehicle usage and therefore reduce traffic, air pollution, and greenhouse gas emissions", there is insufficent evidence the project as proposed meets even its own project objective presented in the DEIR; and in fact evidence to the contrary as the analysis of project alternatives indicates.

2. Project Consistency with Santa Cruz General Plan 2005 Policies (Table 3-5

EQ Policy 2.3.1 - The project appears to maximize rather than minimize impervious surfacing, when compared with all the project alternatives. It does not appear to be consistent with this policy.

EQ Goal 5, which is directed to energy conservation and energy efficiency is not discussed in the DEIR with respect to project consistency. In the absence of an energy conservation analysis, it is not possible to determine project consistency, in particular with EQ Policy 5.5. This is a significant omission from the DEIR.

EQ Policy 6.1.1 and Policy 6.1.2 with regard to construction noise are omitted from Table 3-5 and should be included.

Circulation Policies 1.7, 1.7.1, 1.7.2 and 1.7.3 with regard to parking requirements, on-site truck facilities, design of parking areas are omitted from Table 3-5 and should be included.

Parks and Recreation Policy 1.2.9 which encourages cooperative development of park and recreation facilities on new and existing industrial sites is also omitted, and should be discussed. This policy is directed to the Lower West Side where 2120 Delaware is located.

With respect to Park and Recreation facilities on the Lower Westside, the DEIR does not adequately acknowledge the statement in the General Plan (p.331) that "While the Lower Westside will have sufficient neighborhood park acreage through 2005, the inadequate distribution of exising parks within this area results in a park deficiency." It is now 2008 and no new neighborhood parks, or community parks (also a park deficiency on the Lower Westside) have been created, either on the former "Westside Lands" (now owned by the Unviersityof California) or anywhere else on the Lower Westside. The contribution of the proposed project to neighborhood and communitypark needs is not adequately analyzed either. The assumption, stated on p.4-87 for Impact 4.6-1 does not take into account either the needs of adults in the project for recreation, or the needs of children whose parents may be employed at the project but living off-site.

Since the project site will develop one of the last large undeveloped properties on the Lower Westside with an opportunity for park dedication, the DEIR should consider the possibility of on-site park dedication rather than simply in-lieu park fees (p. 4-88) Without park dedication on this site, it is not clear where the opportunities will remain to fulfill the General Plan goal of adequate park facilities in this area of the city.

The DEIR fails to analyze adequately consistency with Parks and Recreation Policies 1.8, and 1.8.1-4 of the proposed project.

3. Additional Issues

Mitigation Measure 4.5-5a proposes to defer submittal of a revised parking plan for the entire project until after project approval, and delegates to the City Planning Director and Public Works Director revision of parking requirements for the proposed project apparently without public review or comments. The mitigation measure should be revised to clearly require the revised parking plan prior to approval of any of the required permits for the project so that public review and comment is made possible through an environmental review process.

Phasing - the proposed project apparently is expected to develop over a 15 year period, however, the entire site is to be graded as part of initial site preparation and infrastructure improvements. (p. 3-3, DEIR). However, there is no indication of how the area not be developed initially will be treated. Will it just be left as bare dirt with streets until later phases are developed?

The DEIR needs to analyze the impacts of undeveloped portions of the site over a long period of time on the surrounding area, and consider requiring an explicit mitigation measure for that situation. One possibility is to limit initial site preparation to a clearly defined Phase 1, followed by a clearly defined Phase 2, etc, when later phases become feasible.

Furthermore, Mitigation Measure 4.6-3a apparently contemplates approval of the entire project even though water supply cannot at this time be guaranteed to the entire project, and assumes ultimate approval of a desalination facility at some unknown future date. An alternative mitigation measure which limits project approval to a clearly defined phase of the project which can be served would reduce the significant unavoidable impact regarding water supply to a greater degree than the Mitigation Measure proposed in the DEIR.

4. Project Alternatives

The DEIR analysis and discussion of project alternatives maintains that Alternatives 2 and 3 would not meet the project objectives to reduce traffic, air pollution, and greenhouse gas emissions. However, Alternatives 2 and 3 generate far fewer vehicle trips, and require less parking. As stated earlier, there is no evidence of quantified impacts in the DEIR to support that conclusion.

The DEIR does not include a reasonable range of alternatives given that neither the project nor any of the proposed alternatives (1,2, and 3)can reduce the impact on water supply below the level of significant and unavoidable. An alternative needs to be analyzed, probably including a significant dedication of park and recreation space, that would reduce the total level of development on the site to a level that would eliminate the significant and unavoidable impact on water supply. The absence of such an alternative from the DEIR does not provide the "reasoned choice" required by CEQA Guidelines §15126.6 (f).

Thank you for consideration of these comments.

Sincerely,

Celia Scott

Celia Scott

Response to Comment Letter # 21
Celia Scott, A.I.C.P, Attorney at law
April 30, 2008

21-1 Cumulative – Global Climate Change

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts

21-2 Environmentally Superior Alternative – Reduction in Traffic Trips

Comment is noted. As noted on page 5-53 of the Draft EIR, Alternative 3 – Buildout Under Existing Zoning Requirements with No Planned Development would result in the least amount of impacts as it would generate the fewer daily trips, thereby minimizing impacts to air quality and traffic.

21-3 Energy Consumption

As part of comments related to global climate change (see Master Response-Global Climate Change), this comment states that an analysis of the project's energy consumption is required by Public Resources Code section 21100(b)(3). This section of CEQA requires that an EIR include mitigation measures "proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient and unnecessary consumption of energy." Contrary to the commenter's suggestion, this formulation does not require a detailed energy analysis for all projects requiring EIRs. Rather, by its plain terms, all that CEQA requires with respect to energy impacts is that EIRs set forth "measures to reduce the wasteful, inefficient, and unnecessary consumption of energy." (Pub. Resources Code § 21100, subd. (b)(3).) CEQA Guidelines section 15126.4(a)(1)(C) further clarifies lead agencies' obligation on this subject by stating that "[e]nergy conservation measures, as well as other appropriate mitigation measures, shall be discussed *when relevant*." (Italics added). Read together, sections 21100 and 15126.4 provide that energy issues need only be discussed where a project as proposed would lead to the "wasteful, inefficient, and unnecessary consumption of energy." This conclusion is consistent with the general principle that EIRs need not address less-than-significant impacts in detail. (CEQA Guidelines, § 15128; Pub. Resources, §21002.1(e).) In the current situation, the proposed project would not, even without mitigation, result in "wasteful, inefficient and unnecessary consumption of energy," but instead would be subject to requirements of the California Building Code and Title 24 regarding building measures for energy efficiency. The project further proposes to construct the buildings in accordance with LEED certification, which would further reduce energy consumption. In addition, mitigation measure 4.6-3b would require that the project applicant install Energy-Star labeled appliances, which are both water and energy efficient. In short, the proposed project is simply not the kind of project that triggers the obligations (i) to identify significant energy-related impacts and (ii) to propose formal mitigation measures to substantially lessen or avoid those impacts.

21-4 Cumulative Analysis – Global Climate Change

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

21-5 Cumulative Analysis – Global Climate Change Methodology

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

21-6 Cumulative Analysis – Global Climate Change

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

21-7 Cumulative Analysis – Global Climate Change Mitigation Measures

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts

21-8 Cumulative Analysis – Global Climate Change

Please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts

21-9 Consistency with General Plan Policies

Table 3-5, Project Consistency with City of Santa Cruz 2005 General Plan Policies on page 3-26 presents consistency of the proposed project with applicable general plan policies. Consistency of the proposed project with Policy 2.3.1 is addressed within Table 3-5, Project Consistency with City of Santa Cruz 2005 General Plan Policies. The referenced policies in the comment are addressed below and herby incorporated into Table 3-5.

- EQ 2.3.1. The comment states that the project does not appear to minimize impervious surfacing and is inconsistent with this policy. The project's impervious surface is slightly less than allowed within the IG zone district (see Response to Comment 13-1). The policy includes minimizing impervious surfaces with other runoff and water quality controls to reduce urban runoff pollutants to the "maximum extent possible." The water quality analyses conclude that water quality will be protected with implementation of mitigation measures, thus satisfying the intent of this policy.

- Environmental Quality Goal 5. The comment states project consistency with this goal and EQ Policy 5.5 is not addressed. The goal states "Implement to the greatest degree possible, transportation strategies that reduce the consumption of fossil fuels, and energy strategies that increase energy efficiency and energy conservation in all sectors of energy usage and which increase the production and use of renewable energy sources within the City." Policy EQ 5.5 promotes industries that use energy efficiently.

  Consistency Determination: Mitigation measure 4.5-5b would require that the project applicant implement Transportation Demand Management measures to achieve vehicle occupancy goals established in the City's Trip Reduction Program ordinance (Chapter 10.46 of the Municipal Code), including but not limited to: provision of secure, covered bicycle parking; provision of transit access; coordination of ride-sharing with an established provider; membership in the Transportation Management Association; provision of free transit passes and information; provision of preferential parking for carpoolers; and provision of employee showers and lunch areas in buildings with more than 50 people. This mitigation measure would require that the program is monitored monthly by the application and annual reports provided to the City. The mixed use nature of the project also results in trip reductions. Specific land uses are not known at this

time, but given proposed building designs and the type of businesses anticipated, future uses would be energy efficient. See also Response to Comment 21-3.

- EQ Policy 6.1.1 states "Use site planning and design approaches to minimize noise impacts from new development on surrounding land uses."

  Consistency Determination: The proposed project is consistent with this policy. As discussed on page 32 of the Initial Study (Appendix A in the Draft EIR), the project site is located within an industrial area and is located adjacent to industrial uses or industrially designated lands. There are no sensitive receptors adjacent to the project site, but there are residential uses located along Swift Street and Delaware Avenue in the project vicinity. Residential uses are also proposed as part of the project. The proposed project would result in traffic-related noise increases on streets in the project vicinity, including delivery truck traffic. As stated on page 32 of the Initial Study in Appendix A of the Draft EIR, project operations, such as the use of mechanical equipment, would not be expected to result in significant ambient noise increases as the site plan proposes enclosure of mechanical equipment.

- EQ Policy 6.1.2 states "Ensure that construction activities are managed to minimize overall noise impacts."

  Consistency Determination: The proposed project is consistent with this policy. As stated on page 32 of the Initial Study (Appendix A in the Draft EIR), the proposed project would follow performance standards contained in the City's zoning ordinance to ensure that noise-related impacts from construction activities are minimized.

- Circulation Policy 1.7 states "As a condition of development, expansion or change of land use, developers or employers shall mitigate their impacts on circulation (consistent with circulation planning policy and the CMP), provide incentives to enhance the use of alternative transportation and when necessary shall provide transportation impact studies, and phase improvements to reduce traffic impacts and ensure that circulation facilities are adequate to serve the development."

  Consistency Determination: The proposed project is consistent with this policy. The mixed use nature of the project results in trip reductions. A traffic impact analysis was prepared as part of the EIR preparation for the proposed project. Mitigation measure 4.5-5b would require that the project applicant implement Transportation Demand Management measures to achieve vehicle occupancy goals established in the City's Trip Reduction Program ordinance (Chapter 10.46 of the Municipal Code).

- Circulation Policy 1.7.1 states "Reduce automobile parking requirements for developments/land uses that provide effective incentives for alternative transportation (mixed-use/neighborhood commercial areas, bus passes, subsidies, preferential carpool parking, and shuttle services) and investigate ways to mitigate potential impacts on neighborhoods, possibly through residential parking permit programs."

Consistency Determination: The proposed project is consistent with this policy. The parking analysis for the proposed project is presented in Section 4.5, Transportation and Traffic, Impact 4.5-5. The parking requirements were reduced by 10 percent due to the shared use and by an additional 10 percent for non-automobile use programs per the City's code. As described above, mitigation measure 4.5-5b would require that the project applicant implement Transportation Demand Management to achieve vehicle occupancy goals established by the City's Trip Reduction Program.

- Circulation Policy 1.7.3 states "New development with truck traffic shall provide on-site facilities sufficient to allow truck maneuvering and also mitigate impacts related to truck size, weight, noise, and related congestion caused by the blocking of travel lanes."

  Consistency Determination: The proposed project is consistent with this policy. On-site traffic circulation and truck maneuvering was addressed on pages 4-67 through 4-68 of the Draft EIR. A truck turning analysis was conducted by Higgins Associates to analyze trucks maneuvering the site. The results of the analysis indicate that delivery and service vehicles could maneuver on the project site.

- Parks and Recreation Policy 1.2.9 states "Encourage cooperative development of park and recreation facilities on new and existing industrial sites."

  This policy encourages cooperative development of park/recreation facilities, but does not require it. Parks and Recreation Policy 1.8.2 and City regulations allow payment of an in-lieu park dedication fee when required dedication is less than three acres as would be with the proposed project. Please also see Master Response PSU-1 – Parks and Recreation.

21-10 Public Service & Utilities – Recreation Impacts

Please see Master Response PSU-1 – Parks and Recreation.

21-11 Parks and Recreation Policies Consistency

Comment requests project review with Parks and Recreation Policy 1.8 and 1.8.1-4. Policy 1.8 states "Ensure that new development (including additions and remodels) pay for park land and recreational facility demands created by it." The subsequent programs number 1.8.1 through 1.8.4 identify park dedication requirements; permits payment of in-lieu fees when a park dedication requirement is less than three acres; and provides directives for the City to consider cost recovery programs and review and update park requirements.

Consistency Determination: The proposed project is consistent with Policy 1.8, 1.8.1 and 1.8.2 as discussed in Response to Comment 21-9 and in Master Response PSU-1 – Parks and Recreation. The programs 1.8.3 and 1.8.4 are not applicable to a site-specific development project but are directives for City-initiated actions.

21-12 Transportation and Traffic – Revised Parking Plan

See Master Response T-1 – Parking Demand and Supply.

21-13 Project Description – Grading

The site will be required to be revegetated in accordance with City Grading Ordinance requirements.

21-14 Long-Term Impacts on Undeveloped Portions

As stated on page 3-3 in the Project Description of the Draft EIR, the entire project site would be graded as part of initial site preparation and infrastructure improvements. Prior to implementation of development on the site, the project applicant would be required to implement erosion control measures, including but not limited to re-vegetation of disturbed areas with a weed-free mulch over all soil exposed as a result of proposed grading before November 1st of each year as required by Mitigation measure 4.8-2b. Implementation of this mitigation measure would ensure that disturbed areas on the project site are not left exposed until development of subsequent phases of the proposed project proceed.

21-15 Water Supply

See Master Response WS-1 – Water Supply.

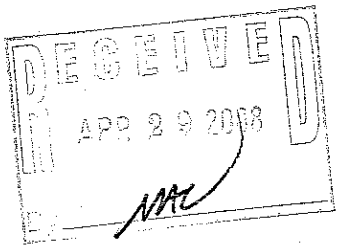
21-16 Alternatives – Global Climate Change Quantification

The comment's reference to a project object is slightly erroneous. See Master Response ALT-1 – Alternatives. It is agreed, as shown on Table 5-15 and discussed in the DEIR text, that all alternatives reduce vehicle trips traveled and associated emissions. Please also see Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

21-17 Alternatives – Range of Alternatives

See Master Response ALT-1 – Alternatives.

H. Reed Searle
114 Swift Street
Santa Cruz, CA 95060
Phone and Fax 831-425-8721
28 April 2008



Ms. Sandy Brown
Planning Dept.
City of Santa Cruz

re: comments on draft EIR, 2120 Delaware, project application #SCH2007012097

Dear Sandy,

I have volunteered to compile questions and comments from a group of people about the project. We have the following comments and requests for further information relative to the draft EIR. We believe the requested information is necessary in order that the City may make an informed decision about this project, which is the largest in City history after UCSC.

Whenever reference is made to traffic or other effects, please address cumulative impact as well as impact from the project alone. The Mandatory Findings of Significance includes cumulative impacts. "Cumulative impacts will be reviewed in the EIR, including but not limited to traffic...."

1. We all know that vehicle traffic increases harmful emissions,. The objective of CEQA and AB 32 et seq is to reduce harmful emissions. An increase in trips is a significant effect. The traffic impact of this project is significant. The only "mitigation" cited is that the project is not as bad as it might be. (5-14). Please explain how 5200 additional ADT does not represent a significant environmental effect both in itself and cumulatively. Please explain how the addition of 5200 ADT from the project is not a significant addition to harmful emissions. (see 5-14). Please include in your response how this additional traffic can comply with Executive Order S-03-05.

2. Increased traffic also contributes to road congestion, and Santa Cruz streets are frequently highly congested now. Please comment on the probability that improving intersections would lead to increased traffic as drivers take advantage of improved driving conditions. Facilitating auto travel is said to increase traffic, as in freeway widening. The potential of increased traffic resulting from improved intersections must be quantified. How the project complies with AB32 etc in view of this analysis must be described.

3. Payment of a TIF or in lieu fee is said to be adequate mitigation of traffic congestion resulting from the additional ADT. The question is how and to what extent payment of these fees actually mitigates these impacts. Payment of a fee does not necessarily reduce traffic (in fact it may serve to increase traffic). There should be a disclosure of how and the extent to which TIF

payment will in fact reduce congestion and harmful emissions.

4. The SCCRTC traffic numbers for 2004 (2004 Transportation Monitoring Report, Santa Cruz County Regional Transportation Commission, March 2005, at page 3) says that Mission St at Baldwin generates 28, 578 daily trips. Please indicate the present ADT on Mission St at Baldwin, and please also indicate the amount and percentage of additional ADT at this point which will result from this and other pending projects. Please include a determination of the extent to which this constitutes a significant environmental effect.

5. What percentage of increased traffic can reasonably be accommodated on Mission St, i.e. what is the carrying capacity of that street?

6. Similarly, existing traffic coming east on Delaware at Swift during peak hour PM is 252. With full build out it is 631. AM peak hour heading west, towards the project is 204 at present and 592 with full build-out. This seems incongruous with ADT of 5000. Please explain the source of these numbers.

7. The EIR (4-65) estimates that 50% of the project traffic will use Mission St. When this is added to the projected traffic on Mission St from other projects and from "normal" growth, what is the expected traffic load on Mission St in 2020, assuming full project build-out?

8. New Westside traffic includes the 5,000 trips to be generated by this project, 8128 (but perhaps fewer) by proposed UCSC expansion, 3200 by Long's Marine Lab, 1600 by 2300 Delaware, 2000 by Safeway and 1200 by New Leaf. That is a total of 23,428 new trips. Can you estimate how much of this traffic will use Mission, Delaware, lower Swift, Almar, Fair and King streets?

9. Please update Exhibit 13B to reflect any current numbers.

10. 2300 Delaware and the Marine Science campus together are expected to generate about 5000 ADT. Much of this traffic will use Delaware St. Yet projections are that of these 5,000 plus additional ADT, only one additional trip will turn right from eastbound Delaware to lower Swift during PM peak hours. (Exhibits 14, 15 and 4,). Only one additional vehicle will turn right on Swanton from eastbound Delaware. The project will generate an additional 5178 ADT. Not a single vehicle per peak hour from this ADT will go south on lower Swift. (Exhibits 10B, 11 , 14 and 15,Exhibits 4.5-6, 5-2). The conclusion seers to be that there will be little use of West Cliff Drive. That seems a very unlikely scenario. Can you clarify or explain?

11. Of the over 5000 ADT to be added by the project, only 1270 will go to Highways 17 and 1 (4-67). Where do the remaining 4000 go?

12. Do the existing and projected ADT numbers include evening, weekend and holiday traffic? If not, can you estimate the amount of this traffic and its impact on Swift, Delaware and Mission? Please include cumulative projects and tourist traffic.

13. Policy M.3.5 of the draft general plan 2020 requires "...new development to be designed to

discourage through traffic in adjacent neighborhoods...". The goal is to "Discourage, reduce, and slow through-traffic and trucks on neighborhood streets (Goal M.3.3) The EIR should describe the extent to which such intrusion is likely to result , whether such intrusion is significant and how it may be mitigated. Policy M.1.6.3 of the draft GP requires that projects "Manage nonresidential parking in residential areas". The EIR does not comment on or quantify the extent of probable intrusion of traffic to residential areas for cut-through or parking nor does the EIR indicate whether this constitutes a significant effect. Please comment on this as to driving and parking from this project and from cumulative projects. (See 4-62 for CEQA requirements that an impact is significant if it is substantial in relation to existing traffic load and the capacity of the street system.) .

14 Can the project include or design road changes or traffic calming measures that would protect lower Swift St and West Cliff Drive from project traffic and from cumulative traffic? Is so, what are the proposals?

15. Why did the EIR fail to examine traffic impacts further down Swift Street towards West Cliff? Why did the EIR fail to examine traffic impacts at the intersection with Pacific Collegiate School during the time when students arrive and depart the school?

16. Can traffic estimates distinguish between residential and business/industrial traffic from the project?

17. Does the availability or probable use of on street parking by users of the project constitute an a significant environmental effect?

18. Please quantify traffic load and delay at Mission and Fair from the project and cumulative projects.

19. Assuming that TIF monies are completely paid, will the total monies collected fully finance the intersection traffic improvements indicated in the draft EIR?? If not, what percentage must the City pay?

20. There is no statement regarding the extent to which the traffic modifications contemplated will increase traffic hazard for pedestrians and cyclists. These should be described and appropriate mitigations suggested(6-62).

21. Most of the project traffic, 50% will use Mission St, Highway 1 and #7. This will further congest the #9 and #1 intersection and is a significant impact. The proposal to mitigate it is to improve #9 but to improve movement on #1 only by a signal modification and by "Widen(ing) and add a second left turn lane from Highway 1 southbound onto Highway 9". (4-66). Please explain how and the extent to which these modifications will reduce Highway 1 traffic at thus intersection.

22. Can a roundabout be constructed at Swift and Delaware within the existing footprint that would accommodate heavy trucks?

23. Do any of the anticipated traffic plans involve widening of streets or taking of any private

property? If so, please specify.

24. 85% of project traffic is estimated to use Mission and Delaware (4-65). Where do the remaining 670 trips per day go?

25. 43% of project traffic will use Highways 1 and 17 (4-65). Where do the remaining 2900 ADT go? Please quantify also with relation to total cumulative traffic?

24. Please estimate the number of workers under the various scenarios in the project who are expected to drive to employment in the project i.e. who will not live in the project. Similarly, please estimate the number of project residents who may be employed outside the project?

25. Is there any intention to require residents to be employed in the project?.

26. Re school availability: Does the proposed number of students attributable to the project assume that all students will reside in the project? (4-87) How many students will come from families who work in but do not live in the project?

27. Is there any significant aesthetic effect on the upper Westside from the relatively uniform buildings with possible reflection and glare? (4-101). Impact 4.7-2 refers to glare not being a problem in the immediately surrounding area, and it may not be. However, a large part of the upper Westside may experience substantial glare from the metal roofs. Please determine whether this constitutes a significant effect and if so, how mitigation can be accomplished.

28. A part of the upper Westside could lose its ocean views from blockage by the 4 storey building. Is this a significant impact?

29. The Westside has inadequate open space. Please explain how payment of an in lieu fee mitigates the demand/need for open apace and parkland (5-19) or produces the needed open space. Would an environmentally superior alternative be to require the needed open space to be provided in the project?

30. Economic consequences to the City may not be applicable to this EIR.. Such impacts are, however, relevant to the draft general plan. In any case, economic effects would be relevant in quantifying benefits to be obtained through a P.U.D. To the extent there is any available study or information on this subject, what are the probable economic impacts to and for the City of the project under the different development alternatives. Would the environmentally superior alternatives be more or less favorable to the economic condition of the City?

31.. Table 3-1 appears to illustrate the square footage for the residential units but its absence from the narrative discussion in the Project Development section makes it difficult to analyze in context of the remaining discussion. Please use the residential square footage measurements in the narrative analysis.

32. On page 3-6, the Northern Zone is described as requiring easements to accommodate larger building footprints. Where are the easements required? Are these easements between lots in the

Project development? A project alternative should be considered to address the project without the Northern Zone buildings should the easements be denied.

33 .The project is described as having four driveways. Is this adequate emergency access for the density of the development? Is this adequate emergency access for residential uses? What is the emergency response time for emergency vehicles to respond to incidents at the back end of the site?

.34 According to page 3-13 of the EIR, the exterior lighting design has not been prepared. Why is this design being delayed?

.35. How long can a valid Development Agreement be extended at the discretion of the City Council?

.36. What is the protocol for future environmental review as the site development permits are applied for?

.37. Table 3-5 outlines the Project Consistency with General Plan Policies.

.38. How does the project have no affect on groundwater when the underground drainage system effectively calls for underground dams?

.39. The drafters state that the Project is consistent with Policy 2.3.1 but how is this possible when the policy speaks to water quality and the consistency speaks to water quantity?

40. How is Policy 4.2 met when Policy 3.4.3 discloses that there will be encroachments into the setbacks of the riparian area?

41. Policy 6.2.1 states consistency in terms of the general surroundings but does not specifically analyze the neighboring residential uses on the adjacent property. Please analyze this impact.

. 42. Page 4-11 discusses the cut and fill of the project. Will the fill be made up of the cut? If not, where will the cut be disposed?

. 43. What are the cumulative (over the entire 15 years) construction impacts to air quality to adjacent residential uses for the life of the entire PUD? What are the cumulative construction impacts to air quality to adjacent residential uses when combined with other planned development in the vicinity over the life of the PUD?

. 44. Page 4-20 discusses Health Risk Assessments ("HRAs") for toxic air contaminant emissions. Please ensure that HRAs are a condition of approval for each project proposed during the life of the PUD.

. 45. Given the discussion of liquefaction on page 4-23 and the disagreement upon peer review, is there a concern about subsidence of adjacent properties should liquefaction occur?

. 46. What is the long term need for additional fill since the Year 1-3 portion of the Project does not include utility construction across the entire site?

. 47. Has the geotechnical report, prepared to address the high groundwater discussed on page 4-25, been peer reviewed? What is the protocol for maintenance issues of the drain? What happens if the curtain drain fails? Where is it anticipated that water will run if the curtain drain does not operate as planned? Mitigation measure 4.2.1a identifies future peer review and registered geotechnical engineer review of the plans. Please prepare this review before finalizing the EIR.

. 48. Did the screening evaluation discussed on page 4-28 make an analysis of soil settlement based on full build out of the site? Is this evaluation uniform across the site? Should each future applicant be required to update this screening evaluation before receiving a permit?

. 49. The traffic study was performed during the peak hours of 7:00 – 9:00 am and 4:00 – 6:00 pm. Are these the accurate peak hours or should traffic be reviewed earlier in the morning and until later in the evening given the commute hours over Highway 17?

. 50. On page 4-59, the parking analysis describes the capacity between Swift Street and Getchell Street. The numbers in this analysis do not add up to give a parking supply between 12 and 26 spaces. Please revise these numbers to reflect demand between 9 and 22 spaces with a total availability of 30 spaces.

. 51. What is the frequency of SCMTD Route 20? Is it hourly? Is it more frequent than hourly? Is it less frequent than hourly?

. 52 What is the estimated number of delivery trucks for the Project during Years 1 – 3? What is the estimated number of delivery trucks at project buildout?

. 53. Mitigation Measure 5.5-5a discusses providing the City Planning Director and Public Works Director with discretion to revise parking requirements. Given the major traffic impacts to the neighborhood, should there be a public process in place to evaluate parking instead of leaving discretion with the Planning Director and Public Works Director?

. 54. Although the EIR and City Water Department determined not to prepare a water supply assessment, should an assessment be performed because the Project could possibly contain any mix of commercial/residential/office space depending on what the market demands?

. 55. On page 4-88 of the EIR, the authors analyze the new residential impacts to the neighborhood. Where did the assumption of the occupancy factor of 1.5 people per unit come from? Does this assumption account for higher occupancy rates in Santa Cruz because of the high cost of housing? Please provide a comparison if the occupancy rate is higher than 1.5.

56. The EIR concludes the water demand is a significant and unavoidable impact. Does approval of this Project give the development in its entirety priority over other projects and development proposals that might come forward? Does the City have the discretion to stop this Project while allowing other future projects to move forward?

57. The landscape plans include fruit bearing trees. Do fruit bearing trees require more water than other native plant species that could be planted instead?

58. The Sensitive Habitat Areas analysis on page 4-106 discusses monarch butterfly migration through and near the Project site. Are butterflies sensitive to development changes around the habitat that they frequent? Where is the closest nectar source(s) for the monarch butterfly? How will the Project affect nearby monarch butterfly habitat?

59. Does parking lot runoff cause more impacts to the creek than building runoff? If so, should the Project be redesigned to avoid parking near the creek?

. 60. Page 5-2 discusses growth inducement with respect to filling the new jobs at the Project site. However, the analysis presumes that a worst case scenario is based only on this Project. However, the cumulative projects in Table 5-1 will also have growth inducing impacts. Please revise this analysis to take into account a realistic worst case scenario with the cumulative projects included in the analysis.

. 61. Will this Project EIR be reviewed and analyzed by the City's Global Warming Action Program Coordinator

.62. How much weight was given to the HOV lane in the cumulative analysis discussion starting on page 5-26 of the EIR? Please revise the cumulative traffic analysis to reflect the inability of the Santa Cruz County Regional Transportation Commission to find a funding source for this project.

63. The entrance to the project is on Delaware. Could it be in the NE corner of the lot, near the Rail track? Would this substantially reduce traffic on lower Swift and Delaware.

Thanks for responding to these concerns.

Sincerely

H. Reed Searle

Response to Comment Letter # 22
H. Reed Searle
April 28, 2008

22-1 Cumulative Impacts

Section 5.3, Cumulative Impacts, in the Draft EIR addresses cumulative impacts of the proposed project for each environmental topic, including traffic.

22-2 Air Quality - Emissions and Global Climate Change

Air quality emissions associated with the proposed project are presented on page 4-17 and cumulative emissions, including the contribution of the proposed project to global climate change are addressed in Section 5.3, Cumulative Impacts (pages 5-2 through 5-31). As presented in Table 4.1-6, Project Buildout Operational Emissions, the proposed project would result in: 50.07 lbs/day of VOC, 60.19 lbs/day of NO_x, 454.71 lbs/day of CO, 48.79 lbs/day of PM_{10}, and 0.24 lbs/day of SO_2. Based on the air quality modeling conducted for the proposed project, buildout would not exceed the MBUAPCD emission significance thresholds for criteria pollutants. Therefore, the proposed project would result in a less-than-significant operational air quality impact under project buildout as the proposed project would not exceed the MBUAPCD emission thresholds of significance. As discussed on page 5-6 of the Draft EIR, cumulative emissions associated with the proposed project were found to be less than significant as the project is consistent with the *MBUACPD Air Quality Management Plan*.

See Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

22-3 Transportation and Traffic – Improvements' Impacts

Analyses under CEQA require identification and impacts and measures to mitigate those impacts. The EIR indicates that the project's impacts will require signalization or installation of a roundabout at the Swift Street/Delaware Avenue intersection and payment of the City's Traffic Impact Fee (TIF) for its contribution to existing traffic congestion and planned improvement at the intersection of Highway 1/Highway 9. Implementation of these improvements is not anticipated to facilitate increased traffic beyond the design capacity of this improvement.

Regarding compliance with AB 32, please see Master Response CUM-1 – Global Climate Change – Cumulative Impacts.

22-4 Transportation and Traffic – Payment of TIF Fees and Air Emissions

The City's TIF program identifies planned improvements to intersections and roadway segments in the city limits in order to improve the level of service during the AM and PM peak hours. In order to mitigate the project's traffic congestion to existing congested Highway 1/Highway 9 intersection, the proposed project would be required to pay the City's TIF fee. The payment of the fee is required, and the City is in the process of developing plans for improvements to this intersection, which would improve it to a level of service C during the PM peak hour. The improvements are intended to address existing traffic congestion.

CEQA requires an analysis of project impacts. The comment requests how the TIF payment will reduce harmful emissions, which is not related to the project. See Response to Comment 22-2 regarding project emissions. Additionally, as discussed on page 4-18, Carbon Monoxide is the primary localized pollutant of concern along roadways. Areas of vehicle congestion have the potential to create "pockets" of CO called "hot spots." Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersection locations. These pockets have the potential to exceed the state1-hour standard of 20.0 ppm and/or the 8-hour standard to 9.0 ppm and the federal levels of 35.0 ppm for the 1-hour standard and 9.0 ppm for the 8-hour standard. In accordance with the *MBUAPCD CEQA Guidelines*, a comparison of "Existing" versus "Cumulative Plus Project" peak hour LOS was evaluated. As indicated in Table 4.1-7: Carbon Monoxide Concentrations on page 4-19 of the DEIR, the proposed project would not exceed state or federal standards.

22-5 Transportation and Traffic – Mission Street/Baldwin Intersection

As discussed in Response to Comment #7-16, the cumulative traffic analysis for the proposed project assumed 27,000 daily trips on Mission Street based on 2007 data as provided by the City of Santa Cruz. This is based on the cumulative projects list as identified in Table 5-1 of the Draft EIR. The referenced SCCRTC traffic report noted by the commenter, prepared in 2005, estimated 28,578 trips. This moderate difference is due in part to the fact that the data is two years older and the fact that recent traffic counts have indicated a general decrease in traffic volumes throughout the region. As such, this variation in daily trips is not considered significant.

22-6 Transportation and Traffic – Impacts to Mission Street

Based on the *Highway Capacity Manual*, the capacity of a four lane undivided arterial is based on the capacity during the AM and PM peak hours. According to the Highway Capacity Manual, the capacity of a four-lane arterial such as Mission Street, is approximately 1,600 trips during the AM and PM peak hour under LOS A conditions and up to 2,400 trips during the AM and PM peak hour for LOS D conditions. According to the traffic impact analysis, under cumulative conditions, approximately 1,400 trips would occur during the AM peak hour and approximately 1,397 trips would occur during the PM peak hour traveling westbound on Mission Street from the Bay Street/Mission Street intersection. Approximately 1,072 trips would occur during the AM peak hour and 1,421 trips would occur during the PM peak hour traveling eastbound on Mission Street from the Almar Avenue/Mission Street intersection. These estimates would approximate the traffic volumes that would be experienced in the vicinity of the Baldwin Street/Mission Street intersection during the AM and PM peak hour. Based on these traffic volumes, Mission Street would be operating within the design capacity at the Mission Street/Baldwin Street intersection. However, impact significance is based on project effects on intersection levels of service as described on pages 4-62 of the Draft EIR.

As stated on page 4-65, approximately 50 percent of the vehicle trips associated with the proposed project would be distributed along Mission Street. The amount of vehicle traffic on the various segments of Mission Street at "Existing Plus Project Buildout" is presented in Exhibit 12. Under "Existing Plus Project (Buildout)" conditions, all of the intersections located along Mission Street: Mission Street/Western Drive, Mission Street/Swift Street, Mission Street/Almar Avenue, Mission Street/Bay Street, Mission

Street/Laurel Street, Mission Street/King Street, and Mission Street/Chestnut Street would operate within City and Caltrans standards.

22-7 Transportation and Traffic – Impacts to Delaware Avenue and Swift Street

Since AM peak hour traffic would occur between 7:00 and 9:00 AM and PM peak hour traffic would occur between 4:00 – 6:00 PM, the volumes presented in the traffic impact analysis for the AM and PM peak hours are the vehicle trips that occur within these peak hours. The peak hour trips are a percentage of the total average daily trips based on the ITE rates for each use (e.g. residential, industrial, etc.). Exhibit 10B in Appendix H shows the project trip assignment to study intersections, which show approximately 115 project trips during the AM peak hour and 379 project trips during the PM peak hour would travel east along Delaware Avenue at the Delaware Avenue/Swift Street intersection with buildout of the proposed project.

22-8 Transportation and Traffic – Cumulative Impacts to Mission Street

As stated on page 4-65 of the DEIR, approximately 50 percent of the vehicle trips associated with the proposed project would be distributed to Mission Street. Cumulative plus project traffic volumes during the AM and PM peak hours are shown on Figure 5-2 of the Draft EIR and are included in Exhibit 15 in the traffic impact analysis (Appendix H in the DEIR); the cumulative traffic analysis is presented on pages 5-24 through 5-30 of the DEIR. As stated on page 5-30 of the DEIR, cumulative development and growth would result in significant cumulative impacts at five intersections (Delaware/Swift, Mission/Bay, Mission/King, Mission/Chestnut and Highway 1/Highway 9). The TIF program identified numerous projects within the City, which were needed to address the effects of cumulative development. All new development in the City is required to pay an impact fee to fund these projects. Improvements are proposed at the Mission Street/Bay Street intersection, Mission Street/King Street intersection, the Mission Street/Chestnut Street intersection, and the Highway 1/Highway 9 intersection. The project will be required to pay the TIF fee, which will go toward funding identified improvements at the intersections along Mission Street and will contribute the project's share to cumulative mitigation at these intersections. The Bay/Mission and Highway 1/Highway 9 intersections would be improved to an acceptable level of service. However, while improvements to the Mission Street/King Street and Mission/Chestnut intersections will help reduce delays, intersection LOS would not be improved to acceptable levels during the PM peak hour.

22-9 Transportation and Traffic – Cumulative Projects

The 2007 list of cumulative projects is presented in Exhibit 13B in the traffic impact analysis, which is included in Appendix H of the DEIR. The projects and the traffic volumes in this exhibit are current. The cumulative project list includes the proposed UCSC expansion, New Leaf Market, Safeway (listed as "Almar Center Expansion"), and Long Marine Lab (listed as "UCSC Marine Science Campus") as noted by the commenter. As noted in Response to Comment 22-8, Figure 50-2 and Exhibit 15 in the traffic impact analysis included as Appendix H in the DEIR presents the cumulative plus project traffic volumes during the AM and PM peak hours, which presents the traffic volumes along study roadway segments under cumulative conditions. Commenter is referred to this exhibit in order to obtain traffic volumes for study intersections and roadway segments.

22-10 Transportation and Traffic – Affects of Cumulative Traffic on Delaware Avenue

The traffic analysis concluded that there would be 6 trips during the AM peak hour and 13 trips during the PM peak hour under cumulative conditions traveling from eastbound Delaware Avenue, making a right on Swift Street toward West Cliff Drive (Exhibits 14 and 15 in the traffic impact analysis); and 19 trips during the AM peak hour and 42 trips during the PM peak hour turning right on Swanton Boulevard from eastbound Delaware Avenue. Based on the traffic distribution, the proposed project would contribute less than one percent of traffic to these turning movements.

22-11 Transportation and Traffic – Traffic Distribution

The trips that are not assigned to Highways 1 and 17 are distributed on local streets. As stated on page 4-64 and 4-65 of the Draft EIR, the trip distribution is based on the origin and destination of all trips to and from the project site. The distribution of project trips was based upon the locations of land uses within Santa Cruz as well as traffic volumes at study intersections. Project traffic was distributed regionally onto the City traffic network as indicated in the traffic impact analysis. Exhibits 9A, 9B, 9C, and 9D in the traffic impact analysis (Appendix H in the Draft EIR) presents the trip distribution based on the land use.

22-12 Transportation and Traffic – Clarification of ADT

For residential, commercial and industrial projects, the City uses weekday and associated peak hours to assess traffic impacts as these uses generally have more traffic on weekdays than weekends. The City uses the “Design Day” peak hour to assess peak traffic conditions that occur due to traffic associated with seasonal tourists/visitors, which occur on Saturdays and Sundays during the summer months in areas affected by the beach and Boardwalk, such as the Beach/South of Laurel area of the City. However, due to the location of the proposed project, the City standards for the preparation of traffic impact reports is to use the AM and PM weekday peak hour to analyze trips associated with development projects where tourism does not significantly affect traffic operations. Therefore, the analysis of tourist traffic is not required for the proposed project. The analysis of cumulative traffic is addressed in Section 5.3, Cumulative Impacts.

22-13 Transportation and Traffic – Traffic and Overflow Parking on Residential Neighborhoods

As indicated in Response to Comment 22-6, impact significance is based on changes in intersection level of service. The referenced General Plan 2030 policies are still in draft stage and have not been adopted. Traffic impact analyses do not address traffic intrusion in neighborhoods.

The proposed project will add traffic to the neighborhood streets in the immediate area. Several studies have been made regarding the effects of traffic on the quality-of-life in residential neighborhoods. The variables affecting these impacts include traffic volumes, type or mix of traffic (i.e. passenger cars, trucks, motorcycles, emergency vehicles, etc), traffic speed, perception of through traffic as a percentage of total traffic, street alignment, crash experience, on-street parking, residential setbacks from the street, pedestrian traffic, and street pavement conditions (which would add traffic noise as the pavement deteriorates).

Based on industry standards, daily traffic volumes below 890 vehicles per day are typically acceptable for residential streets. For collector and arterial streets between 1,000 and 10,000 trips per day would be considered "traffic dominated." Delaware Avenue is a collector street that is currently "traffic dominated." Based on existing traffic volumes, Delaware Avenue, east of Swift Street currently experiences approximately 3,090 trips per day. The proposed project would add approximately 2,000 trips per day to Delaware Avenue east of Swift Street. This would result in an increase in traffic that may be noticeable to some residents on Delaware Avenue. However, the level of service at the Delaware Avenue/Swift Street intersection would continue to operate at an acceptable LOS A (as mitigated) with implementation of proposed project.

Farther east on Delaware Avenue, the level of service would drop at the Delaware Avenue/Fair Avenue intersection from LOS A under existing conditions to LOS B during the PM peak hour under project buildout and the level of service would remain at LOS B at project buildout at the Delaware Avenue/Almar Avenue intersection. Furthermore, the traffic analysis concluded that there would be limited traffic (less than one percent of existing traffic) traveling south on Swift Street toward West Cliff Drive. These additional trips were considered minimal on Swift Street and West Cliff Drive with implementation of the proposed project and thus would not be noticeable to the residents.

See Master Response T-1 – Parking Demand and Supply regarding parking intrusion into neighborhoods.

22-14 Transportation and Traffic - Traffic Impacts to Lower Swift Street

While the proposed project would contribute additional new vehicular trips along Swift Street, the Draft EIR concluded that there would be no significant impacts to traffic along this segment of Swift Street. Swift Street is a collector street that accommodates both commercial and residential traffic. The traffic impact analysis concluded that the proposed project would not result in any traffic traveling south on Swift Street toward West Cliff Drive. Therefore, the proposed project would not require changes to the roadway design and/or traffic calming measures.

22-15 Transportation and Traffic – Impacts to Pacific Collegiate School

Please see Response to Comment 20-3.

22-16 Transportation and Traffic – Clarification of Residential vs. Business Traffic

Table 4.5-3, Project Years 1-3 and Buildout Worst-Case Trip Generation on page 4-64 of the DEIR presents the average daily traffic during the weekdays, as well as the traffic during the AM and PM peak hour for each proposed use (e.g. residential, light manufacturing, research and development, office and retail).

22-17 Transportation and Traffic – On-Street Parking Impacts

The DEIR found that the project does not provide the amount of parking required under City ordinances, which could result in project employees or residents using on-street parking in the neighborhood. However, Mitigation measures 4.5-5a and 4.5-5b would reduce the off-site parking impacts to a less-than-significant level by requiring the project to provide sufficient onsite parking, which would not result in offsite impacts. Implementation of these mitigation measures would ensure that the availability of off-site parking is within City standards and therefore would not have a subsequent impact on

the on-street parking in the vicinity of the proposed project. See also Master Response T-1 – Parking Demand and Supply.

22-18 Transportation and Traffic – Impacts at the Mission Street/Fair Avenue Intersection

The Mission Street/Fair Avenue intersection was not included as a study intersection in the traffic impact analysis. Traffic studies for the City focus on signalized intersections unless a non-signalized intersection and its critical movement is on a major access route. The proposed project does not contribute to the critical movement at the Mission Street/Fair Avenue intersection. The through movements on Mission Street experience little or no delay. Therefore, the Mission Street/Fair Avenue intersection was not included in the traffic impact analysis.

22-19 Transportation and Traffic – TIF

As noted on page 4-57 of the Draft EIR, the TIF program, adopted in June 2005, evaluated over 60 intersections and identified numerous projects within the City, which were needed to address the effects of cumulative development and fees were established. The fees are used to fund planned improvements at those intersections and roadways included in the program. All new development projects are required to pay TIF fees, which are calculated at the time of building permit issuance. The fee is based on the trip generation of the proposed project. By ordinance the City has identified the per trip fee, which was determined by dividing the total cost of all projects needed in the City by the total cumulative additional trips added by new development The current fee $366 per trip. At the current rate, the proposed project would generate approximately $1.8 million in TIF fees. The project TIF fees would contribute the project's share to intersections that are currently impacted (Highway 1/Highway 9) or would be under cumulative conditions; it is not required to fund the entire intersection improvement. However, the project impact at Swift Street/Delaware Avenue would require the applicant to make the improvement. The proposed project, as it is built out, would have to pay the fees as required by the program in effect at the time building permits are issued in order to finance the cost of the improvements in the TIF program.

22-20 Transportation and Traffic –Traffic Improvements' Hazards to Pedestrians & Bicyclists

The commenter does not provide clarification as to which traffic modifications (e.g. internal traffic circulation or intersection improvements proposed as mitigation) would be a concern for alternative transportation improvements. In addition, page 6-62 noted by the commenter is not a valid page in the DEIR. The City assumes that the commenter is referring to page 4-62 in Section 4.5, Transportation and Traffic and the thresholds of significance which requires that projects be evaluated to determine if the project would "result in a roadway design that would increase traffic hazards to motors vehicles, or pedestrians or substantially impede pedestrian, bicycle, or transit system operations." Traffic improvements that are implemented as part of the City's TIF program would be evaluated individually to determine if they would have any effect on alternative transportation as part of the design review process. No additional mitigation measures are necessary.

22-21 Transportation and Traffic –Highway 1/Highway 9

As stated on page 4-66 of the Draft EIR, the improvements to the Highway 1/Highway 9 intersection included in the City's TIF program would improve the level of service from

LOS E to LOS C, which is within the City's LOS standards. The physical improvements that are planned also are summarized on this page of the DEIR.

22-22 Transportation and Traffic – Swift Street/Delaware Avenue Roundabout

If construction of a roundabout at the Swift Street/Delaware Avenue intersection is not feasible within the existing footprint under City standards, the City at its discretion shall require that the intersection be signalized and re-striped in order to improve the level of service at this intersection, as described in mitigation measure 4.5-1a.

22-23 Transportation and Traffic – Traffic Improvements Affect Private Property

Commenter does not raise an environmental issue. Therefore, no response is necessary.

22-24 Transportation and Traffic –Trip Distribution

Project traffic was distributed regionally onto the City traffic network as indicated in the traffic impact analysis. Exhibits 9A, 9B, 9C, and 9D in the traffic impact analysis (Appendix H in the Draft EIR) presents the trip distribution for each of the land uses through the City.

22.25 Live/Work Balance

The traffic impact analysis assumed a 30 percent reduction in weekday trips and trips during the AM and PM peak hour based on the live/work component of the proposed project. In addition, the traffic impact analysis assumed a 15 percent reduction in trips due to the mixed-use nature of the proposed project. The remaining trips to the proposed project would be from employees that will be employed at the project site and/or would live within the project site, but commute to employment outside of the proposed project.

22-26 Project Description – Work Requirement

The proposed project would not require residents to work at the project site, however according to the project objectives for the proposed project the proposed project would create adaptable live/work units with the flexibility to meet the diverse needs of enterprising individuals with small and mid-size businesses.

22-27 Public Service & Utilities – School Impacts

The Draft EIR analyzed the potential impacts to schools that would result from the 42 students that would be anticipated to be generated by the residential uses within the project site. As the City of Santa Cruz job/housing balance shows shortage of jobs as compared to the available housing, it could be anticipated that the jobs provided by the proposed project would be filled by existing residents, whose children are already enrolled in the Santa Cruz City School District (District). As discussed in Response to Comment 19-5, potential secondary growth generated from new jobs created by the project is discussed on page 5-2 of the Draft EIR in the Growth Inducement section.

In addition, Draft EIR Section 5: CEQA Considerations, page 5-18, discusses the cumulative impacts to the School District related to cumulative growth, specifically the Westlake Elementary School attendance area, which would be servicing the proposed project. Based on school district student generation rates, it is estimated that

approximately 165 students would be generated and distributed between the three schools. The contribution of school-age children associated with cumulative development increases the demand for school services within the District. However, the District is currently under capacity district-wide and anticipates a continued decline in enrollment in the future. Furthermore, there is an existing additional capacity to accommodate cumulative student growth. As a consequence, the District has the capacity to absorb new students without the need for new or expanded facilities.

22-28 Aesthetics – Westside Glare Impacts

The proposed project includes a light reflective cool roof that would be comprised of metal, single ply, composition. However, the Design Guidelines (which stress flexibility), include a whole host of materials besides metal building siding and roof materials. Other siding includes concrete (natural, painted and stained) and stucco. In addition to the galvanized metal, other varieties can include corten weathering, as well as factory painted. Besides metal, roof materials can be composition shingle. Thus, it is not likely that all of the buildings will be constructed using highly reflective metal. Furthermore, the buildings are oriented in a north-south position so that large expanses of roof surface area would not be exposed to upper westside residences. In addition, the proposed landscaping plan would serve to partially buffer and screen the visual appearance of all buildings, including roofs.

22-29 Aesthetics – Westside Views

The project site is located within an industrial zone where there is an existing mix of building designs, heights, and massing. Building heights would be consistent with existing zoning regulations. The environmental analysis focuses on impacts to public scenic views. n accordance with CEQA, State CEQA Guidelines, City of Santa Cruz plans and policies, and agency and professional standards, impacts on private views are not considered to be significant.

22-30 Public Service & Utilities - Recreation Impacts

Please see Master Response PSU-1 – Parks and Recreation.

22-31 General Statement – Economic Impact

Because economic effects associated with alternatives are not considered under CEQA and given the fact that no economic studies have been prepared on this subject, the comment regarding the economic consequences to the City of implementing different option of the proposed project is noted and referred to City staff and decision makers for further consideration.

22-32 Project Description Clarification

Table 3-1: Proposed Project Summary, is described in Section 3: Project Description, subsection 3.3.3. The table is called out on page 3-4, in the second paragraph. Some of the square footages described in the table are included in the narrative. However, inclusion of all the table data in the narrative would be repetitive, cumbersome, and potentially confusing. As the table is included immediately following the narrative, the information contained within it is easily accessed.

22-33 Project Description – Easement

The easements as currently described would be for access and utility easements to serve lots on the northern zone. If building footprints change in this northern zone, the underlying lots remain the same so these easements ensure the lots the access they would require. The easements currently are indicated in the tentative map to provide access and utilities to parcels in the northern zone not on the main loop circulation plan. If the ultimate development of the northern zone differed from that shown on the master development plan the current easements would potentially be required to be modified. The intent of the easements is to insure each individual lot has access rights built in to the project. Since the referenced easements are for access and are depicted on Figure 3-4 (Vesting Tentative Map) in the DEIR, access easements would be required, and thus, would not be "denied" as suggested in the comment. As indicated in the DEIR, these easement locations may be modified if there is a proposed change to the development on the northern lots in the future.

See also Master Response ALT 1 – Alternatives Analysis.

22-34 Transportation and Traffic – Access and Safety

Site access is reviewed on pages 4-67 and 4-68 of the DEIR. Please also see Response to Comment 18-2.

22-35 Public Service & Utilities – Response Time

The potential impact on emergency response times to the project site were analyzed in the Initial Study (Appendix A of the DEIR) and was considered a less than significant impact as the response times to the project site would be within existing service standards.

22-36 Project Description – Lighting Design

A lighting plan has been provided for the site which shows lighting along Delaware Avenue and the parking areas. Typical with most developments, detailed building lighting plans are not provided until plans for the building permit are submitted. Lighting for the project would be governed by the project's Design Guidelines, which require lighting to not be overly bright and outdoor lighting would be required to be down-lights or shielded to help decrease the amount of light directed into the night sky.

22-37 Development Agreement

A Development Agreement has no extension deadline, provided the extension is approved through the standard City Council public hearing process. Since it is an ordinance, any extension agreement requires approval by the City Council.

22-38 Additional Environmental Review

The EIR is a project-level EIR and therefore no additional environmental review would be required unless future projects substantially deviate from the Design Guidelines or other proposed project features or baseline conditions change that would warrant future review as part of a City discretionary action. Design issued would be further reviewed by City staff as part of the permit review process. Pursuant to Chapter 24.08, Part 5 of the City's Municipal Code, a design permit would be required for all proposed improvements to the site. The purpose of the design permit is to promote the public health, safety, and

general welfare through the review of architectural and site development proposals and through application of recognized principles of design, planning, and aesthetics and qualities typifying the Santa Cruz community. Following review, the design permit would provide comprehensive design approval for overall project layout, maximum building square footages, building footprints, building elevations and building architecture, conceptual landscaping, lighting and circulation plan, and construction phasing.

22-39 General Statement – Project Description

Comment is noted. Commenter does not raise an environmental issue and therefore no further action is required.

22-40 Hydrology and Water Quality – Groundwater Impacts

In accordance with CEQA, State CEQA Guidelines (including Appendix G), a project impact on groundwater would be considered significant if the project would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. As the project does not propose to draw any groundwater, but rather would re-direct the groundwater flows, under CEQA it is considered not to have a significant effect on groundwater. See also Response to Comment 2a-1 regarding effects of installation of subsurface "curtain drains."

22-41 Project Description – Consistency Analysis (Water Quality)

The consistency language contained in Table 3-5 Project Consistency with City of Santa Cruz 2005 General Plan Policies, is related to water quality issues outlined in General Plan policy 2.3.1. Please see the below consistency statement, which was included in the Draft EIR.

> "CONSISTENT – The proposed project would comply with all existing federal, state, and local *water quality regulations* including the City's "best management practices" thereby reducing urban runoff pollutants. Project drainage would be collected and conveyed via an underground storm – detention system with discharge pre-development rates, consistent with City standards."

22-42 Project Description – Consistency Analysis (Riparian Setbacks)

It is unclear which policy 3.4.3 is being referenced. However, the City adoption and Coastal Commission certification of the *City-wide Creeks and Wetlands Management Plan* supersedes existing General Plan/LCP policies related to riparian setback encroachment. The applicant has indicated that the site plan will be modified to eliminate riparian setback encroachments identified in the DEIR as per Mitigation Measure 4.8-1a.

22-43 Project Description – Consistency Clarification

The referenced policy relates to noise. The potential noise impacts related to the proposed project operation and exposure of sensitive receptors on the site were discussed in the Initial Study, included in Appendix A of the Draft EIR.

22-44 Project Description – Clarify Cut/Fill Ratio

As discussed in the Project Description on page 3-3 of the DEIR, the proposed project would involve the excavation of approximately 13,500 cubic yards of soil. The amount of

fill material needed to grade the site is 18,400 cubic yards. According to the geotechnical report prepared for the proposed project, existing onsite soils are generally suitable for use as engineered fill. Given that fill material compacts by 15 to 20 percent, 2,140 to 1,220 cubic yards of fill would need to be imported to the site. Materials used for engineered fill would be free of organic material and contain no rocks or clods greater than six inches in diameter.

22-45 Air Quality - Cumulative Construction Air Quality Impacts

Cumulative regional emissions associated with the proposed project are addressed in Section 5.3, Cumulative Impacts. As discussed on page 5-7, according to the *MBUAPCD CEQA Guidelines* (and in the MBUAPCD's response to the EIR Notice of Preparation), projects that are consistent with the "Air Quality Management Plan" (AQMP) would not result in cumulative impacts since regional emissions have been factored into the AQMP. In a letter dated April 20, 2007, the Association of Monterey Bay Area Governments (AMBAG) determined that the proposed project would be consistent with the growth forecasts in the City of Santa Cruz. Therefore, the proposed project is consistent with the 2004 regional forecasts and the AQMP and would have a less than significant cumulative impact.

22-46 Air Quality – Health Risk Assessments

Mitigation Measure 4.1-2 requires that any future business that propose a land use that would pose a significant health risk (e.g., truck idling and movement, warehouse/distribution centers, truck stops, transit centers or uses that emit toxic air contaminants) to nearby sensitive receptors prepare a Health Risk Assessment.

22-47 Geology and Soils – Liquefaction

As discussed in Impact 4.2-2 in Section 4.2, Geology and Soils, the inconsistencies regarding the liquefaction potential of the project site were resolved when following peer review by Kleinfelder, Haro, Kasunich and Associates performed a screening evaluation for liquefaction potential. The results of the screening evaluation indicated that a thin sand layer (~2 feet thick) at approximately 13 feet below the ground surface, has the potential to liquefy and settle on the order of 3/8 inches. Based on the small amount of potential soil settlement and the thickness of overlying non-liquefiable soil, Haro, Kasunich and Associates concluded that surface damage is not anticipated to occur. Therefore, potentially liquefiable soils would not cause ground failure during an earthquake on the site. As such, potential impacts off-site would be highly unlikely.

22-48 Project Description – Clarify Cut/Fill Ratio

Please see response to Comment #22-44.

22-49 Geology and Soils –Curtain Drain

The geotechnical report prepared by Haro, Kasunich and Associates was peer reviews by Kleinfelder as subconsultant to RBF Consulting as part of the preparation of the EIR.

The curtain drains will be an underground drainage system that is designed not to require maintenance and are expected to function properly for the life of the project. The outfalls can be inspected regularly to ensure that they are functioning properly and identify signs of potential problems. If they were to fail, the portion that has failed would have to be dug up and replaced. During such time that a portion or all of the curtain

drain has failed, ground water levels may raise temporarily. However, if should be noted that the likelihood of failure and a subsequent rise in ground water is remote.

The construction plans have not been prepared and therefore cannot be reviewed as part of this FEIR (nor are they required to be under CEQA). Additional geotechnical review may be required for future site-specific development as stated in mitigation measure 4.2-1a, which would be reviewed by the Building Inspector as part of the building permit application as is currently practices. Mitigation measures 4.2-a does not require peer review of subsequent geotechnical reports.

22-50 Geology and Soils – Liquefaction

The screening analysis determined that based on the small amount of potential soil settlement and the thickness of overlying non-liquefaction soil, surface damage is not anticipated to occur with buildout of the project site. Therefore, additional engineering recommendations are not necessary.

22-51 Traffic and Transportation – Methodology Clarification for the AM and PM Peak Hour

The City's AM and PM peak hour have been established by the City's Public Works Department.

22-52 Traffic and Transportation – Parking Correction

There was a typographical error on page 4-59 of the DEIR, which presents the parking surveys on Delaware Avenue and on Swift Street. Based on a parking capacity of 30 spaces and a daytime demand of between 9 and 22 spaces, there would be an on-street parking supply of between 8 and 21 spaces. The Draft EIR has been modified herein to reflect these changes. See Chapter 2 – Revisions to Draft EIR.

22-53 Traffic and Transportation – Transit Routes

Page 4-60 of the Draft EIR discusses the daily bus service to the study area via the Santa Cruz Metropolitan Transit District (SCMTD) Route 3 and Route 20.

22-54 Traffic and Transportation – Delivery Trucks

The traffic impact analysis evaluates the total number of vehicle trips to the project site, but does not distinguish between cars and delivery trucks. Non-residential trip generation rates typically account for all user traffic.

22-55 Traffic and Transportation – Parking Revisions Public Process

See Master Response T-1 – Parking Demand and Supply.

22-56 Water Supply –Water Supply Assessment

See Master Response WS-1 – Water Supply.

22-57 Public Service and Utilities – Occupancy Factor

The residential occupancy factor of 1.5 persons per household cited on page 4-88 were based on the assumption that 50% of the flex units would be converted to studios. Because all the residential units are one bedroom and studio units, the full average City

household size of 2.4 likely would not occur, and thus, it was estimated that with the one or no bedrooms, there would be an average of 1.5 residents per unit.

22-58 Water Supply – Priority

See Master Response WS-1 – Water Supply.

22-59 Water Supply – Priority (Other Projects)

See Master Response WS-1 – Water Supply.

22-60 Water Supply – Fruit Trees Water Requirements

See Master Response WS-1 – Water Supply.

22-61 Biological Resources – Monarch Butterfly Habitat

As discussed in the DEIR, review of the site by two biologists found that the project would not impact monarch butterflies as there is no evidence of butterfly use on the site and there are no trees on the property that would be removed.

22-62 Biological Resources – Parking vs. Building Runoff

Water quality impacts are addressed in the Hydrology section of the DEIR. See also Response to Comment 2a-1.

22-63 Cumulative – Secondary Growth Impacts

See Response to Comment 19-5. The few non-residential projects that are included in the cumulative projects list would be expected to attract local workers and not result in secondary growth.

22-64 Project Review – City's Global Warming Action Program Coordinator

The City's Climate Change Action Coordinator was consulted during preparation of the Draft and Final EIRs. The City's Climate Change Action Coordinator is tasked with creating a comprehensive program to achieve a 30 percent reduction in greenhouse gases by 2020. The City's Global Warming Action Program Coordinator will be working with commercial, residential, and municipal uses within the City to develop programs supporting efficiency and conservation, sustainable living, and a greater investment in renewable energy sources.

22-65 Cumulative Analysis – HOV Lanes on Highway One

As discussed on page 5-30, the Route Concept Report for Highway One includes the addition of High Occupancy Vehicle (HOV) lanes to Highway 1. The preliminary review/design review is underway, but funding remains unknown. Therefore, this improvement was not assumed to be in place for the cumulative analysis.

22-66 Traffic and Transportation – Alternative Access at the Northeast Corner of the Lot

Comment is noted regarding relocating the entrance to the project site in the northeast corner of the lot near the railroad track. Relocation of the entrance to the project site closer to the existing railroad crossing could create a safety hazard. With respect to this relocation reducing traffic on Swift Street, the proposed project would contribute new vehicular trips along Swift Street, however the DEIR concluded that the proposed project

would contribute less than one percent of traffic along the segment of Swift Street south of Delaware Avenue.

From: **H. Reed Searle** <hrsearle@sbcglobal.net>
Date: 2008/5/13
Subject: 2120 Delaware project, traffic
To: sandyjbrown@gmail.com

Sandy, I appreciate the time and help you, Chris and Eric gave us several weeks ago. I'm sorry that I am late in expressing my appreciation.

It occurred to me that no place in the EIR could I find any breakdown of the amount of the 5,000 ADT that is attributable to residents of the project coming and going, versus business employees and visitors. The information may be there, but, as happened before, I can't find it.

If the information is available, I'd appreciate knowing where it is. If not, it may be appropriate to ask the traffic analysis people for a breakdown. I understand that this should have been raised in comments---so if it's too late to raise this, that's OK too.

Many thanks.

H Reed Searle
114 Swift St.,
Santa Cruz, Ca. 95060
Phone and Fax 831-425-8721
hrsearle@sbcglobal.net

--

Sandy Brown, AICP
Contract Planner

City of Santa Cruz
Dept. of Planning & Community Development
809 Center Street, Room 206
Santa Cruz, CA 95060

(831) 588-8204 - Cell
(831) 420-5119 - Voice
(831) 420-5101 - Fax
sandyjbrown@gmail.com

Response to Comment Letter # 23
H. Reed Searle
May 13, 2008

23-1 Trip Distribution

As stated on page 4-64 and 4-65 of the Draft EIR, the trip distribution is based on the origin and destination of all trips to and from the project site based on the use. The traffic impact analysis distributed vehicle trips based on the use onto the City traffic network as indicated in the traffic impact analysis. Pages 10 – 12 and Exhibits 9A, 9B, 9C, and 9D in the traffic impact analysis (Appendix H in the Draft EIR) for each component of the project: research and development, office, retail, and residential.

April 27, 2008

Ms. Sandy Brown
Planning and Community Development Department
City of Santa Cruz
809 Center Street
Santa Cruz CA 95060

Re: Comments – 2120 Delaware Mixed Use Project

Dear Ms. Brown:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the proposed development at 2120 Delaware Avenue. I have comments regarding Air Quality (Impact 4.1-1), Transportation and Traffic (Impact 4.5-1, 4.5-2) and Hazardous Materials (Impact 4.3-2).

Initially, as a general comment, City Staff and the Project Development team have been extremely proactive in providing detailed project information, hosting informational meetings and responding to comments/ questions from neighbors regarding this project. They should be congratulated for their work. Additional reflection on the City's Preliminary Draft General Plan Goals concerning *design guidelines as needed to address the visual transition between areas of higher density and/or intensified development and adjacent existing developed neighborhoods* (CD2.1.4) and *defin(ing) the appropriate character for new development, including its relationship to neighborhoods surrounding those areas* (CD 2.1.9) is warranted. Integrating this project into nearby residential/ commercial neighborhoods will help to support the successful long-term transformation of this area.

Comments regarding specific impacts include:

Air Quality
The Mitigation measure for Impact 4.1-1 recommends a variety of measures to reduce the short-term air quality impacts associated with construction activities.

I recommend that construction-related traffic should be directed through the Western Avenue Intersection via Natural Bridges Drive and Delaware Avenue. This further mitigation would result in minimal project cost and would reduce/eliminate exposure of short-term toxic air contaminants and emissions to nearby residents.

Transportation and Traffic
The Mitigation measure for Impact 4.5-1a recommends either signalization or the construction of a roundabout as determined by the Department of Public Works.

I recommend that the City require a roundabout for this mitigation. Roundabouts provide an inexpensive to operate traffic control as an alternative to a traffic signal and can be

can be designed to moderate traffic speeds and to provide a more aesthetically pleasing intersection. According to *trafficcalming.org*, roundabouts also provide enhanced safety compared with traffic signals. Table 4.5-1 indicates that the selection of a roundabout would provide a higher level of service and improved traffic flow than the selection of the signal option. The construction of a roundabout may also increase pedestrian and bicycle access to and from the proposed project by creating a defined route from the project site to nearby businesses. Furthermore, by constructing a roundabout, the City can negotiate with the applicant to determine the fair share cost of the intersection improvement and request that any savings be applied towards other streetscape improvements such as landscaping.

The Mitigation measure for Impact 4.5-2 recommends that Traffic Impact Fees (TIF) for this project should be allocated to the planned Highway 1/ Highway 9 intersection improvement.

I recommend that the City utilize project TIF for traffic mitigation in the surrounding area. The proposed mitigation, improving the H1/H9 intersection, appears to conflict with Impact 4.5-3 (*proposed project-generated trips would result in increased traffic on Highways 1 and 17 that would not represent substantial increases*). Therefore, the City should create a General Industrial District/ Performance Overlay Zone and use funds within this development area to encourage appropriate neighborhood and activity center development (ex. Pedestrian friendly frontage and streetscapes and attractive pedestrian oriented areas). The project is described as a mixed-use development that is proposed as a neighborhood, "integrating residents and businesses in a work-live setting and incorporating environmental principles to reduce and minimize reliance on the automobile". Therefore, adverse impacts to the surrounding project area, rather than the H1/H9 intersection, should be the focus of any proposed mitigation. The use of TIF funds, within this immediate development area, will help encourage the successful transition of this former industrial zone, composed primarily of site specific manufacturers, into a technology rich neighborhood, that encourages interaction, collaboration, and innovation.

Hazardous Materials

The Mitigation measure for Impact 4.3-2, regarding the potential for increased handling of hazardous materials near PCS School and nearby residences is unclear.

I recommend, like construction access, that the transportation of hazardous materials be limited to the Western Drive access point via Natural Bridges Drive/ Delaware Ave., where there are no residences and limited potential contact with surrounding residential areas and schools.

Thank you for your consideration of these comments.

Sincerely,

David J. Terrazas

Response to Comment Letter # 24
David J. Terrazas
April 27, 2008

24-1 General Statement – City Responsiveness

Comment is noted. The City staff appreciates Mr. Terrazas' support for the City staff's efforts.

24-2 Land Use – Project Consistency

Comment is noted. The project site is located within an industrial zone where there is an existing mix of building designs, heights, and massing. Although the proposed project would result in the construction of 26 buildings with four stories of 55.5 feet roof peaks, the proposed project design would be consistent with building size, types, and designs typical of an industrial zone, and would not substantially degrade the existing visual character of the area or result in significant aesthetic impact.

24-3 Air Quality – Mitigation Measure Suggestion

Comment is noted. As discussed on page 4-13 of the Draft EIR, the proposed project would not result in a significant impact from construction trips associated with the proposed project. Emissions from construction traffic would not result in the short-term exposure of toxic air contaminants. Therefore, the short-term exposure of residents to toxic air contaminants would not occur with implementation of the proposed project.

24-4 Traffic and Transportation – MM Roundabout Suggestion

Comment regarding roundabout mitigation preference is noted and referred to City staff and decision makers for further consideration.

24-5 Transportation and Traffic – TIF Suggestion

Impact 4.5-3 addresses increased traffic on Highway 1 and Highway 17, whereas Impact 4.5-2 addresses intersection operations at Highway 1/Highway 9. The Highway 1/Highway 9 improvements are being proposed in conjunction with Caltrans as discussed in the DEIR.

TIF fees cannot be transferred in order to benefit a specific neighborhood as they are required for improvements throughout the City. As noted on page 4-57 of the Draft EIR, the TIF program, adopted in June 2005, evaluated over 60 intersections and identified numerous projects within the City, which were needed to address the effects of cumulative development. Fees were established to fund planned improvements at those intersections and roadways included in the program. All new development projects are required to pay TIF fees, which are calculated at the time of building permit issuance. The fee is based on the trip generation of the proposed project. By ordinance the City has identified the per trip fee, which was determined by dividing the total cost of all projects needed in the City by the total cumulative additional trips added by new development. The current fee $366 per trip. The proposed project, as it is built out, would have to pay the fees as required by the program in effect at the time building permits are issued in order to finance the cost of the improvements in the TIF program.

24-6 Hazardous Materials – Transport Routes

The potential impact on the Pacific Collegiate Charter School and neighboring uses was determined to be less than significant, because industrial activities within the proposed project would likely be small-scale and any person or business that uses hazardous materials would be required to prepare a Hazardous Materials Management Plan (HMMP) to ensure the safe handling, storage and control of hazardous materials and health risk assessment (HRA) to determine potential health risk to nearby sensitive receptors, such as children in the Pacific Collegiate Charter School and nearby residents, pursuant to state and local requirements as described in subsection 4.3.2: Regulatory Setting (Section 4.3: Hazardous Materials).

As stated in CEQA Guidelines Section 15126.4, an EIR has to describe mitigation measures, which would minimize significant impacts. As the Draft EIR Impact 4.3-2 was determined to be a less-than-significant impact, no mitigation measures were required.

Comment regarding hazardous materials transport route is noted and referred to City staff and decision makers for further consideration.

2 REVISIONS TO THE DRAFT EIR

The following text changes to the Draft EIR are organized by: Draft EIR headings (e.g., Section 4.4 Hydrology and Water Quality), page number, paragraph number and/or location on the page, and location within the paragraph. As noted in Chapter 1 of this document, changes in the text are signified by strikeouts (~~strikeouts~~) where text is removed and by underline (underline) where text is added.

Section 2: Summary of Environmental Impacts

Page 2-1, second paragraph

The project consists of a Vesting Tentative Subdivision Map for a 45-lot subdivision (plus 11 common area lots) to accommodate a mixed-use industrial-residential project, and Planned Development, Design, Special Use, Coastal and Watercourse Development Permits, a Development Agreement, and a Sign Program. The majority of the planned industrial lots are approximately 9,000-14,000 square feet in size, although nine lots are about 14,000-20,000 square feet in size, and six lots are greater than 20,000 square feet in size. The 45 proposed lots would be further divided into residential and business condominium units.

Section 3: Project Description

Page 3-2, second paragraph

The proposed project consists of a Planned Development, Coastal Permit, Special Use Permit, Design Permit, Watercourse Development Permit, a Sign Program, a Development Agreement and Vesting Tentative Subdivision Map for a 56-lot subdivision (including 11 common area lots) on a 20-acre parcel. Development plans call for a mixed-use industrial/commercial/residential development with potential buildout of 535,553 square feet of buildings including up to 248 residential units in the general industrial/performance/coastal/shoreline protection overlay (IG/PERS/CZ-O/SPO) zoning district.

Page 3-9, first paragraph

In addition, for each lot in the subdivision, a "Sub-Association" or Cost Center consisting of condominium owners and/or building owners within that lot will be established in the project legal documents to provide for the operation and management of the ~~would be created to manage the~~ common facilities ~~interests~~ of the buildings on that lot.

Page 3-13, last paragraph

Lighting

Buildout of the site would include exterior lighting, which is typical of an urbanized setting. According to the project Design Guidelines, lighting would provide illumination, but would not be overly bright. There are no detailed plans for lighting on the site at this time; however, it is most likely that all outdoor lighting would be down-lights with shielding above to help decrease the amount of light directed into the night sky. A final lighting plan would be required for issuance of a Design Permit. An exterior lighting plan shall also be required to be provided in conjunction with the development of future buildings. Lighting would also be required to be provided as streetlights along Delaware Avenue (if needed) during the initial development period and adjacent to the creek trail

as the trail is developed (A preliminary lighting plan was provided on the site plan that shows streetlights).

Page 3-15, Table 3-4. Planned Development Requested Variations

Table 3-4. Planned Development Requested Variations

Requested Variation	IG Zone Standard	Proposed Project
Private Open Space	Multifamily dwellings in IG zone district ~~area~~ are subject to RM district regulations. 200 sq. ft. per unit for studio and one-bedroom units. Community housing projects also require 100 sq. ft. per unit of immediately accessible open space	Up to 74,400 square feet of open space required. Project proposes common open space instead by providing 187,895 sq. ft. of ground level open space in addition to balconies. This variation will provide more common area open space. A private residential open space varies from 60 to 480 square feet.

Page 3-16, second paragraph

Within seven calendar days of the final local action on a coastal permit, the City shall provide notice of its action by first class mail to the Coastal Commission and to any persons who specifically requested notice of such final action. Such notice shall include conditions of approval and written findings and the procedures for appeal of the local decision to the Coastal Commission. Appealable Coastal Permits shall not be deemed complete and a final action taken until all local rights of appeal have been exhausted. The Coastal Commission has ~~not yet~~ determined ~~if~~ that the project is subject to the Coastal appeal process.

Page 3-25, Table 3-6

California Regional Water Quality Control Board	• Review Notice of Intent and Storm Water Pollution Prevention Plan • Potential Approval of NPDES Phase 2 Municipal Stormwater Permit • Approval of NPDES for discharge of collected dewatering

Section 4.1: Air Quality

Mitigation measure 4.1-1a on page 4-15 first paragraph

4.1-1a The project applicant shall limit the amount of grading on the project site to less than 8.1 acres per day for minimal earthmoving and 2.2 acres per day of earthmoving (grading and excavation) and implement ~~require implementation of~~ the following dust control measures during site preparation and grading, consistent with the MBUAPCD rules to reduce fugitive dust impacts:

- ❑ Water all active construction areas at least twice daily. Frequency shall be based on the type of operation, soil, and wind exposure;
- ❑ 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 that are unused for at least four consecutive days;

- ❑ Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites and if visible soil material is carried onto adjacent public streets;
- ❑ ~~Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;~~
- ❑ Hydroseed or apply (non-toxic) soil binders ~~stabilizers~~ to inactive construction areas (previously graded areas inactive for ten days or more);
- ❑ ~~Enclose,~~ Ccover, ~~water twice daily or apply (non-toxic) soil binders to~~ exposed stockpiles (dirt, sand, etc.);
- ❑ Prohibit all grading activities and limit traffic speeds on unpaved roads ~~to 15 mph~~ during periods of high wind (over 15 mph);
- ❑ Install appropriate best management practices or other erosion control measures to prevent silt runoff to public roadways;
- ❑ Replant vegetation in disturbed areas as quickly as possible;
- ❑ Install wheel washers at the entrance of the construction site for all exiting trucks, 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 onetime;
- ❑ Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints (the person shall respond to complaints and take corrective action within 48 hours);
- ❑ Ensure that the phone number of MBUAPCD is visible to the public for compliance with Rule 402 (Nuisance).

Mitigation measure 4.1-1b on page 4-15 last paragraph

4.1-1b In accordance with the recommendations of the MBUAPCD, the following measures shall be required on heavy-duty equipment to reduce impacts from diesel exhaust and acrolein emissions during grading:

- ❑ The proposed project shall require that heavy-duty equipment use a biodiesel fuel (B99 blend) or similar fuel that exceeds the standards outlined by CARB and the MBUAPCD to minimize emissions of diesel exhaust on all onsite equipment used during grading activities, or
- ❑ The project applicant shall be required to use construction equipment in compliance with the CARB Off-Road Diesel Engine Standards (i.e. 2003 or later models) for all onsite heavy-duty equipment used during grading activities or install oxidation catalysts on heavy-duty equipment.

Prior to the issuance of the grading permit, the project applicant shall demonstrate to the satisfaction of the City of Santa Cruz that these methods

to reduce diesel exhaust and acrolein emissions are included on the contractor bid documents.

Mitigation measure 4.1-2 on page 4-20, last paragraph

4.1-2 As required by Monterey Bay Unified Air Pollution Control District, a Health Risk Assessment shall be prepared for any future businesses that propose land uses that pose a potential health risk (e.g., truck idling and movement, warehouse/distribution centers, truck stops, transit centers or uses that emit toxic air contaminants) to nearby sensitive receptors. The Health Risk Assessment shall be subject to specific methodologies that apply to new or modified projects pursuant to MBUAPCD Rule 1000, *Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants* and shall be prepared in accordance with the appropriate standards, procedures, and methodologies of the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines (OEHHA 2003). The analysis protocol shall be submitted to the MBUAPCD for approval prior to undertaking the analysis. Each successive Health Risk Assessment shall account for emissions from any previously approved uses based on previously prepared assessments to account for cumulative emissions. If ~~unacceptable risks are found,~~ any new source, reconstructed source, and/or modification to an existing source exceeds the Reference Exposure Level (REL) for the TAC or the Reference Concentration (RfC), if an REL does not exist for the TAC, or results in estimated emissions to cause a net risk in excess of one cancer incidence per 1 x 10^5 population the use shall be denied unless otherwise modified to reduce risks to accepted levels.

Section 4.2: Geology and Soils

Page 4-25, second paragraph

The geotechnical report also recommended that the site be dewatered sufficiently to allow for soil modification (i.e., excavation and engineered fill replacement). Because wet soil conditions from a high groundwater table were encountered across the site during field investigations, soil modification to lower groundwater conditions may be required. ~~may require the installation of subsurface drains prior to grading.~~ If the water table naturally drops far enough during the summer time, deep plowing and rowing of subsoils in mid to late summer would help accelerate the aeration process and may allow the soils sufficient time to dry for site grading activities to occur.

Page 4-25, third paragraph

According to the project's civil engineer, the recommended design solution to lower groundwater levels would be to construct two ~~a~~ "curtain drains" 10 feet below the ground surface extending east to west across the project site ~~along the northern boundary of the project site 10 feet below the ground surface~~ (see Figure 4.2-1: Proposed Curtain Drain Location). In addition to the originally proposed curtain drain along the northern site boundary, a second curtain drain across the site, approximately one-third of the distance north from the southern boundary, has been proposed since circulation of the Draft EIR to further reduce high groundwater levels and dewater the soils as needed for site construction (see Figure 4.2-1: Curtain Drain Locations). The southern curtain drain would discharge into the southern storm drainage system and would not require an additional outfall into the creek. A curtain drain consists of a perforated pipe placed in a trench filled with drain rock. Groundwater collects in the pipe and is conveyed into a

drainage way at a lower elevation. By intercepting groundwater entering the site along the northern edge of the project site and conveying it to Arroyo Seco Creek, the curtain drain would effectively lower the water table throughout the entire project site. This drainage system would also include measures to prevent runoff within the creek from "back charging" the trench and pipe (Bowman & Williams, May 21, 2007).

Page 4-26, first paragraph

The north curtain drain, located along the northern boundary of the project site, would discharge in to an existing 18" high-density polyethaline (HDPE) pipe that is currently used to drain surface water from the site. Minor additional fortification (i.e. rip-rap) would be install around the base of this outfall to minimize the potential for streambed erosion. The south curtain drain, located further south would discharge into the proposed southern storm drainage system and would not require an additional outfall into the creek (personal communication with Robert Henry, Bowman & Williams, June 12, 2008).

Flows from the curtain drains are expected to be highly variable in response to seasonal groundwater variations and individual storms. Unknown factors would control how much flow would be intercepted by the northern drain and how much would remain in the ground to be intercepted by the southern drain. Though there are uncertainties in the discharge rates from the curtain drains, it is expected that these flows would be on the order of a few hundredths of a cubic foot per second and, therefore, would not be expected to be significant to either erosion or flood potential along the creek (memo from Harvey Oslick, RBF Consulting, June 2, 2008)

Based on research and groundwater flow calculations prepared by Bowman & Williams (November 1, 2007 and June 5, 2008), the two curtain drains ~~system~~ would sufficiently lower groundwater levels across the site to provide favorable conditions for grading operations.

4.3: Hazardous Materials

Impact 4.4-3 on page 4-36 to 4-37

Impact 4.3-3: The proposed project would not result in exposure to hazardous materials found onsite ~~as previous contaminated soils from adjacent industrial uses have been remediated~~. This is considered a less-than-significant impact.

While there have been significant industrial operations upgradient of the project site, investigations of soil and groundwater quality at the eastern edge of the project site demonstrated that either these activities did not significantly impact the project site or where impact did exist, remediation had been carried out such that no further action ~~has~~ was ~~been~~ required (Remediation Testing and Design, 2004). The Phase 1 environmental assessment recommends that a remaining monitoring well on the project site should be properly destroyed under permit and that any indications of former monitoring wells be evaluated for proper destruction. Additionally, the assessment found several homeless camps on the site with waste areas, including human waste, discarded lead-acid batteries and general trash, which may contain hazardous substances and should be removed and properly disposed. Lastly, the assessment indicates that there is a possibility of the existence of agricultural wells on the site due to historical use as farmland. Any indications of wells identified during site grading or development should be evaluated to determine if the wells were ~~property~~ properly destroyed.

Based on comments received on the Draft EIR, Weber, Hayes & Associates reviewed the Phase I Environmental Site Assessment. The Phase I ESA included a site inspection to document current conditions and a historic review of previous land use, including a check of historic air photos (1928-2003). There were no current or historic records identified in the Phase I ESA report that documents an accumulation of discarded lead-acid batteries or other wastes at the site.

The Phase I environmental site assessment reviewed historical aerial photographs documenting that the project site was used for agricultural purposes from at least 1928 through 1968, but there are no records documenting specific pesticide use at the project site. A number of "persistent pesticides" of concern were used during that era, which include organochlorine pesticides, especially DDT and its metabolites DDE and DDD. DTSC has developed shallow soil screening protocols that target testing of organochlorine pesticides prior to agricultural land use conversion, which shall include preparation of a sampling plan which identifies established regulatory threshold limits for residual organochlorine concentrations in soil, and includes a plan for collecting samples from 8 eight equi-space areas.

Comments on the Draft EIR questioned whether the proposed project site dewatering and installation of curtain drains might affect the PCE plume on the adjacent site, which may enter the project site and result in PCE contaminated water being discharged into Arroyo Seco Creek. Weber, Hayes and Associates provided additional review of this concern and conducted the following work:

1. Review of the March 2008 EIR for 2120 Delaware Mixed Use Project, specifically addressing concerns regarding proposed groundwater dewatering and potential migration of nearby PCE plume.
2. Research of current environmental data submitted to regulatory agencies (i.e. the SWRCB GeoTracker database) and discussed remediation plans proposed for the adjoining site former SCI plating facility with the current owner (Mr. Eklof) and his environmental consultant (A+ Environmental Solutions).
3. Prepared estimated future ground elevation contour maps for dewatering conditions, beginning with measured groundwater elevations from the adjacent Eklof solvent-release site's monitoring wells, and estimated dewatering elevations from proposed curtain drain plans prepared by Bowman and Williams, civil engineers.
4. Research of potential methods for creating a barrier to groundwater flow between the project site and adjacent Eklof solvent-release site.

The proposed dewatering includes construction of two curtain drains running roughly east-west across the project site, capturing very shallow groundwater and draining it to the adjoining ephemeral Arroyo Seco Creek drainage, located along the western property boundary. Curtain drains are gravel-filed trenches with a buried pipe at the bottom that are designed to mitigate shallow groundwater conditions by channeling it away from the site. These two drains will be placed at a depth of approximately 10 feet below ground surface (invert pipe elevations at approximately 60 feet and 52 feet MSL, per Bowman and Williams, 2008) and are intended to lower groundwater across the

entire project site by several feet for soil excavation and recompaction (see (see revised Figure 4.2-1 at the end of this chapter for proposed drain locations and elevations).

Sixteen years of depth to groundwater measurements taken at the adjacent Eklof solvent-release site's monitoring wells has shown a consistent groundwater flow direction to the southeast, away from the project site. In addition, repeated laboratory tested groundwater samples obtained from the monitoring well network has shown that the distribution of the contaminated solvent plume to be away from the project site. The most recent published report of annual groundwater monitoring (2007) continues to show the PCE plume extends to the southeast, away from the project site, and underneath the intersection of Delaware Avenue and Swift Street (RTD, Inc, January 19, 2007).

The adjoining Eklof site contains high concentrations of chlorinated solvents (primarily PCE and TCE) in groundwater, including in monitoring wells located close to the project site's boundary. Recent communications with the adjacent property owner indicate that consultants have recently completed new vapor, water and soil sampling work (May 2008), and are preparing a sampling report with plans for active remediation of the solvent plume, and some additional metals contamination in shallow soils beneath the former plating shop. The actual scope of remediation and startup timing has not yet determined.

Sampling in 2008 at the Eklof Monitoring well MW-1, the closest well to the proposed southern curtain drain location detected PCE concentrations at 190 ppb (Dave Houghton, A+ Environmental Solutions, personal communication, report pending). The California MCL for PCE is 5 ppb. This information indicates that PCE plume concentrations at a well located 50-70 feet east of the proposed southern curtain drain is at 190 ppb. There is no data on PCE groundwater concentrations between MW-1 and the proposed curtain drain location.

The Weber Hayes review indicates that the proposed active remediation for solvents (injection of oxidation compounds to breakdown solvents in-situ) could significantly reduce existing concentrations of solvents in groundwater within a year, but probably will not eliminate them entirely. The responsible party for the adjacent Eklof solvent-release site will be required to conduct long-term groundwater monitoring to verify cleanup to regulatory threshold limits.

Based on the Weber, Hayes' review of existing boring logs, there is no barrier to shallow groundwater flow across the property boundary, as borings on both sides identify roughly 10-15 feet of unconsolidated sediments over a hard layer of bedrock. Groundwater flow is primarily through a sandy zone at the base of the unconsolidated sediments. The thin, saturated sandy zone is overlain by much lower permeability soils consisting of mixtures of silty and clayey soils. This stratigraphy is typical in coastal marine terraces in this area. Groundwater levels in wells screened in this basal sandy zone rise to within a few feet of the ground surface during wet periods.

Depth to first water elevations and groundwater flow paths are dynamic. That is, groundwater elevations can fluctuate in response to changes in seasonal rainfall, as well as local changes in drainage, recharge or excavation. Even with these variables, shallow groundwater flow is usually controlled by topography, and groundwater flow is typically towards discharge points such as creeks, drains and the ocean.

In order to show groundwater flow after dewatering has stabilized and hydraulic conditions are in equilibrium, a map of projected groundwater contours was developed. Figure 4.3-1: Estimated Groundwater Contours with Curtain Drains represents Weber, Hayes' analysis of the groundwater flow contours and direction that will develop under future conditions with dewatering drains installed and functional. Specific groundwater elevations will vary seasonally, but this overall flow condition is predicted based on the existing information, with the additional of known groundwater elevations at the proposed drain locations.

Once groundwater is stabilized and at equilibrium, the installation of curtain drains will induce some lateral groundwater flow from the east (from Swift Street side), causing relatively minor changes in shallow flow patterns. Local surface recharge to shallow groundwater and lateral groundwater flow may be induced from Arroyo Seco Creek drainage on the west (when it has surface water). Figure 4.3-1 p indicates that with dewatering there is a potential for some migration of groundwater from the adjacent Eklof solvent-release site property onto the Redtree project site, at the extreme southeast corner of the development. The overall impact once the drains have taken effect is expected to be a drop in local groundwater levels, with only slight shifts in the overall groundwater flow pattern.

In addition, when the drains are first installed there may be temporary periods when groundwater levels at the drains are lower than groundwater elevations at the Eklof site. There is the potential under these conditions for groundwater flow to be more directly towards the project site from the adjacent Eklof site. The amount of groundwater flow and the potential for solvent transport under these conditions would depend on specific conditions, but would likely be temporary, until the steady state conditions were re-established.

Because of the many possible variations in timing of drain construction, rainfall events or lack of rain, and starting groundwater conditions, it is not possible to quantify every possible scenario of future groundwater flow. The Weber Hayes' review of the proposed dewatering shows it will have the potential for changing local shallow groundwater flow to create groundwater flow from the Eklof site to the project site, but only in the southeast corner of the site. The area of groundwater flow from the adjacent site towards the project site could be larger during transient groundwater conditions, such as right after the drains are first installed, or under other conditions (such as remediation injection of water at the Eklof site). This potential impact may decrease over time, as remediation reduces solvent concentrations on the adjacent property, and long-term groundwater flow directions are reestablished after installation of the drains.

Although the long-term change in groundwater flow direction is predicted to be slight, the Weber, Hayes Associates evaluation indicates there is the potential for dewatering to cause limited groundwater flow and PCE migration from the adjacent site to the project site, under both short-term and long-term (transient and steady state conditions). Under long-term conditions, groundwater elevations at MW-1 will drop and the contaminated plume will be downgradient of the curtain drain. However, under some short term conditions, if groundwater flow occurs from MW-1 on the Eklof site to the curtain drain, the curtain drain could capture water with PCE and discharge it to Arroyo Seco creek.

Potential groundwater and solvent migration onto the project site can be prevented or minimized by the installation of a groundwater flow barrier along the property boundary,

extending from the southeast corner, north to beyond the eastern terminus of the closest curtain drain. Potential groundwater flow barrier methods include: sheet piling, constructed slurry walls, and pressure grout injection. Each of these methods can effectively reduce, (although not absolutely prevent) groundwater movement across the property boundary. Any barrier to groundwater flow should target flow through the saturated sandy zone first encountered in most soil borings several feet above the bedrock surface. The existence of a bedrock "floor" at depths of roughly 10-15 provides a solid bottom boundary to groundwater flow. A barrier which greatly reduced the permeability of the sandy zone and extended down to the low permeability bedrock would suitably mitigate the potential for groundwater and solvent migration across the property boundary.

The Weber Hayes review indicates that some sheet pile construction methods may not create a barrier to groundwater flow, and construction of a slurry wall may require sampling and handling of excavated materials for potential contamination from the adjacent Eklof solvent-release site. Therefore, investigation and design of an appropriate grout injection mitigation program, along the portion of the property boundary shown on Figure 4.3-2, is recommended. The project applicant has amended the project application to include this measure as outlined below, and with implementation this measure would prevent the contaminated groundwater plume from entering the project site, being collected and discharged in Arroyo Seco Creek.

One other concern associated with potential migration of PCE or other solvents onto the project site is the potential for vapor intrusion into future buildings. An additional condition of approval is recommended below to address this concern.

Recommended Condition of Approval

Although no mitigation measures are required, the following Condition of Approvals ~~is~~ are recommended.

- Implement all recommendations contained in the Phase 1 environmental assessment (Remediation Testing and Design, December 2004), which include: identification and proper destruction of onsite wells; removal of homeless camps; and proper destruction of former agricultural wells if found during construction.

- Test for the potential presence of organochlorine pesticides prior to agricultural land use conversion by implementing all recommendations contained within the Soil Sampling Plan for Persistent Pesticides (Weber Hayes & Associates, May 20, 2008), which include taking representative soil sample at equi-distances from multiple depths; and if pesticides are detected at concentrations above established regulatory thresholds preparing a soil grading, sampling and disposal plan subject to review and approval by the Santa Cruz County Health Services Agency.

- If the contaminated groundwater plume on the adjacent Ecklof site is not fully remediated at the time of project initiation, the applicant shall include in the design and improvement plans, a grout injected barrier or similar effective means to prevent the potential for migration of a PCE groundwater plume onto the project site, as proposed. Installation will be in accordance with final recommendations of the geotechnical/geological consultant, which will be presented to City staff prior to issuance of grading permit and installation of the

curtain drains. Such measure will not be required if documentation is provided to the City that the adjacent groundwater plume has been remediated and accepted by the Regional Water Quality Control Board.

- Incorporate vapor intrusion barriers into the proposed building design in the southeastern corner of the project site. Vapor intrusion barriers must be incorporated in the building foundation design, and may be a Passive Venting System or a Vapor Barrier Membrane.

Section 4.4: Hydrology and Water Quality

Page 4-46, First Paragraph, Last Sentence

This detention system is sized to reduce discharge flows to pre-condition rates during a 10-year storm event, consistent with existing City standards

Page 4-48, Table 4.4-1 Estimated Pre- and Post-Project Runoff (10-Year Storm Event)

Table 4.4-1 Estimated Pre- and Post-Project Runoff (10-Year Storm Event)

Project Area	Southern	Northern	Total
Detention Manifold	**1-4**	**5-8**	**1-8**
Pre-Development Flow (cfs)	4.67	3.85	8.52
Post-Development Flow (cfs)	13.18	10.88	24.06
Net Change (cfs)	+ 8.51	+ 7.03	+ ~~12.54~~ 15.54
Source: Preliminary Hydrology and Stormwater Detention Volume Calculations, Bowman & Williams (March 30, 2006)			

Page 4-50, Add the following text before Recommended Condition of Approval.

Potential adverse impacts resulting from increased rate, volume, and duration of runoff are typically streambed and bank erosion. These potential impacts should be considered from the outfall location on the site to the point at which discharges are contained to a pipe that discharges into Monterey Bay. The extent of the channel that could be exposed to increased runoff quantity include approximately 800 linear feet along the project boundary north (upstream) of Delaware Avenue and approximately 400 linear feet south of Delaware Avenue to where the channel flows into a pipe.

As indicated above, the "Arroyo Seco Creek was realigned in 2003 to its current location along the western border of the project site and was constructed to mimic a natural drainage course. The creek's channel bottom and sides are re-vegetated and rock check dams were installed in the flow line of the creek (Bowman & Williams, March 30, 2006). The new channel is also wider than the channel downstream, thereby significantly reducing flow velocities. The Delaware Avenue culvert provides effective grade control for the channel upstream from it, which, combined with the rock check dams, vegetation and channel configuration, provide the channel upstream from Delaware Avenue with a low susceptibility to erosion. The channel between Delaware

Avenue and where flows are confined to a pipe is heavily vegetated and does not appear to becoming incised.

The Draft EIR reviewed project peak discharge rates during major storm events. Most of the site currently drains to Arroyo Seco Creek (even prior to its relocation), and the proposed project would continue drainage into the creek in a controlled fashion similar to the existing condition through a controlled storm drainage system that would limit flows to a 10-year storm event, consistent with current City requirements. Considering the existing and future project capacity requirements, and existing erosion control features in the creek adjacent to the proposed project, the installation of the site storm drainage and curtain drain system outfalls, whether at the upstream or downstream ends of the property are not anticipated to significantly impact the existing channel.

Furthermore, the applicant's engineer has indicated that energy dissipators will be installed at the outlet to reduce flow velocity, and as part of the outlet control structure, a weir system will provide flow protection over a series of storm events (Bowman and Williams, June 2008). Flow rates will be maintained at pre-development conditions, and thus, downstream erosion would not be anticipated as velocities will be maintained.

The channel downstream from the Delaware Avenue culvert extends less than 500 feet before it terminates into a pipeline which discharges into Monterey Bay. The channel downstream from Delaware Avenue is highly vegetated and has grade control established at the downstream end by the pipeline, thereby making it unlikely that significant erosion would be induced by increased low flows from the site. At low flows, the vegetation in the channel adjacent to and downstream from the project may provide incidental additional water quality treatment before discharges reach Monterey Bay. Furthermore, the watershed, within the lower part of which the proposed project would be constructed, has substantial upstream development that would be expected to have already significantly impacted the frequency and duration of discharges in the creek.

Therefore, it is not anticipated that the project would not alter drainage patterns in a manner that would result in substantial erosion or siltation on- or off-site. Furthermore, discharge rates from curtain drains would be expected to be on the order of a few hundredths of a cubic foot per second. Flow rates that low would not be expected to be significant to either erosion or flood potential along the creek. Consistent with future anticipated General Permit requirements per the City's new SWMP, the applicant would be required to provide additional calculations of potential impacts to Arroyo Seco Creek to demonstrate that the final design of detention facilities and their outlet controls do not negatively impact peak flow conditions in the creek as a result of modifying the timing of flows.

Page 4-50, Recommended Condition of Approval

- ❑ Prior to recordation of a Final Map, the project engineer shall submit to the City a final drainage plan and calculations for the proposed storm-sewer detention system that includes outfalls to the Arroyo Seco Creek that can discharge a combined flow greater than a 10-year storm event (32 cfs). The calculations shall demonstrate how the site drainage system, including detention capacity, will be expected to respond to both the 10-year and 100-year design storms for a 24-hour duration. The analysis shall include flow routing of runoff from the upstream watershed into the widened channel to

demonstrate how the available storage in the channel upstream from the culvert can be expected to respond to project flows and affect flow rates from the site detention facilities. This analysis shall be used to perform final design of the onsite detention and flow control system. Pre-and post-project condition discharges, with and without the proposed detention system for the 10-year and 100-year design storms, shall be presented.

Page 4-51, Second Paragraph

These units typically only "filter" the water under low-flow and first-flush conditions unless they are very large. Typically, these systems are more cost-effective pre-treatment devices than traditional wet or dry basins and use less space. While manufacturers differ with respect to performance claims, vortex separators are able to achieve an aggregate reduction of 90 percent of all particles down to 150 microns and to capture floatable items, as well as oil and grease (California Stormwater Quality Association [CASQA], 2003). However, because the vortex separators are not able to remove fine sediment particles (50 to 100 microns), the CASQA gives them an overall medium removal effectiveness rating for sediment and low effectiveness ratings for nutrients and metals (CASQA, 2003).

Page 4-52, Add the following text before Mitigation Measures

Based on comments received by the RWQCB, a different system to meet stormwater quality objectives than that proposed by the applicant and currently permitted by the City may be required to meet future stormwater quality objectives and standards.

The City is in the preliminary stages of preparing new Storm Water Management Plan (SWMP) to be compliant with the Phase II Municipal Storm Water Permit (General Permit). The SWMP will potentially increase the standard for what the City will be able to accept as the "maximum extent practical" (MEP) for reducing pollutant discharges.

Systems such as swales, bioretention devices (including planter boxes, sand filters, media filters, and potentially other types of devices may be included to meet project water quality objectives to the MEP. Low impact development (LID) techniques may also be implemented to assist in meeting the overall project water quality objectives. MEP can be defined as the maximum treatment that can be achieved before the "cost would exceed and benefit to be derived" (State Water Resources Control Board Order No. WQ 2000-11).

Page 4-53, Add new Mitigation 4.4-2a; renumber remaining measures with following changes

4.4-2a Prior to recordation of a Final Map the project engineer shall submit to the City a final drainage report that includes documentation that the proposed stormwater quality devices can be expected to achieve at least an 80% reduction in TSS, unless it is demonstrated that this exceeds the MEP. The means to demonstrate satisfaction of the criteria must follow an accepted protocol. Acceptable protocols include Guidance for Evaluating Emerging Stormwater Treatment Technologies – Technology Assessment Protocol – Ecology (Washington State University, January 2008) and Investigation of Structural Control Measures for New Development (prepared by: Larry Walker Associates, Inc., November 1999 for Sacramento Stormwater

Management Program. Systems such as swales, bioretention devices (including planter boxes, sand filters, media filters, and potentially other types of devices may be included to meet project water quality objectives to the MEP. Low impact development (LID) techniques may also be implemented to assist in meeting the overall project water quality objectives.

4.4-2e Utilize pervious pavement and pavers to the maximum extent practicable ~~possible~~.

Section 4.5: Transportation and Traffic

Page 4-59; sixth paragraph

Between Swift Street and Getchell Street the capacity is approximately 30 spaces. The demand during the daytime varies between 9 and 22 spaces, which indicates a surplus of on-street parking supply of between ~~12~~ 8and ~~26~~ 21 spaces. At 11:00 PM the demand was 25 spaces. The highest parking occupancy is 87 percent of available capacity.

Page 4-60; last paragraph

The project site is bordered by the railroad line and right-of-way on the north. The rail line forms a continuous thirty-two mile corridor from Davenport to the City of Watsonville. The Union Pacific Railroad currently owns and operates this rail line. An average of three trains per week travel on this line. About 355,000 tons of cement and coal are shipped by rail to and from the RMC Pacific Materials cement plant in Davenport each year. An additional 40,000 tons of lumber and 50,000 tons of perishables are shipped by rail to and out of Santa Cruz County (Santa Cruz County Regional Transportation Plan). The Santa Cruz County Regional Transportation Commission (~~SCRTC~~SCCRTC) signed a letter of intent in December 2004 to purchase the rail right-of-way for future transportation purposes including a bicycle and pedestrian path along the right-of-way. The ~~SCRTC~~SCCRTC also intends to maintain the existing freight service on the rail line. The *2005 Regional Transportation Plan* (Policy 3.4.5) supports reserving areas adjacent to rail lines for future rail and bus facilities as part of new development adjacent to rail lines.

Page 4-62; first paragraph

site. The riparian trail and landscaping), would be required to be completed by the Project Owner's either concurrently when any parcel west of Tea Avenue is built upon or within 7 years, whichever comes first. On the north end, the trail would terminate at the northern end of the project site. The connection at the Union Pacific right-of-way would be completed if and when the railroad right-of-way was modified to a rail-trail facility. ~~A sidewalk would also be constructed along their project frontage on Delaware Avenue.~~ The connection to the railroad ROW would be completed by the Project Owners when (and/or if) the railroad ROW is modified to a rail-trail facility within the time period of the Development Agreement.

Page 4-66; last paragraph

4.5-2a The project shall be required to pay the City Traffic Impact Fee (as calculated by the City) based on the project trip generation at the time each building permit is issued for the use for which the building permit is issued, which ~~of issuance of building permits that~~ would provide the project's contribution to the planned Highway 1/Highway 9 improvement.

Page 4-68; sixth paragraph

At present, only a concrete gutter and curb runs along the project's frontage with Delaware Avenue; i.e., no sidewalk is present. Installation of sidewalks on the site frontage will be required and will facilitate pedestrian access. Furthermore, in the near future, Santa Cruz County Regional Transportation Commission (SCCRTC), in association with other regional agencies, envisions the planning of a Monterey Bay Sanctuary Scenic Trail (Coastal Trail), which is expected to be initiated in 2008. ~~The trail is expected to be located to the south of the project.~~ SCCRTC also intends to purchase the existing rail line right-of-way (ROW) that borders the northern boundary of the project site and use a portion of it as a bicycle and pedestrian path. Therefore, SCCRTC recommends that the proposed project include access to and from the property on its northerly boundary to the existing rail line ROW.

Page 4-70; last paragraph

Implementation of Mitigation Measures 4.5-5a and 4.5-5b would reduce the project's impact to a l*ess-than-significant* level. ~~, and Mitigation Measure 4.5-2c could further help reduce parking demand~~.

Page 4-71; Mitigation Measure 4.5-5a

4.5-5a Prior to approval of the Vesting Tentative Map, the project applicant shall submit to the City for approval a ~~revised site plan~~ Parking Plan Overlay for the entire project site that ~~provides~~ demonstrates sufficient parking using the worst-case parking requirements as defined in the EIR, i.e. a minimum of 1,105 on-site parking spaces. The Parking Plan shall show lots reserved for on-site parking using "worst-case" parking requirements as defined in the FEIR, *i.e.*, the number of spaces per square foot of development. Following the permitted construction of 260,000 square feet of development, the project applicant shall provide funding to the City for preparation of an independent study to analyze actual parking conditions associated with the Year 1-7 building program ~~and to identify a parking generation rate for this type of mixed-use project~~. The parking study shall, based on actual parking conditions, specify parking generation rates established by the mix of uses already developed and the probable mix of uses for the balance of the development of the project. The parking study shall also utilize the standards of shared parking and mixed uses specified in the FEIR. Applicant will have the right to restrict future specified uses (within the approved ranges of uses set forth in the FEIR) to reduce parking demand and any such reduction shall be considered in the parking study. In order to satisfy existing and/or projected parking demands, the parking study shall calculate the amount of parking required to be provided. Should this parking study determine that different parking requirements are warranted for build-out of the project based on the mixed-use characteristics of the project, the City's Planning Director and Public Works Director shall ~~may, at their option,~~ revise the parking requirements for the proposed project and accept from the applicant a ~~modified site plan that is consistent with these revised parking requirements.~~ Modified Parking Plan and/or, at the option of the Applicant, a restriction on future uses. In the event the applicant restricts future uses, then the applicant shall record a declaration of use restrictions on title for all

of the remaining undeveloped lots, subject to review and approval of the Planning and Public Works Directors. The Modified Parking Plan shall be consistent with the revised parking requirements, and to the extent of any reduction in the parking requirements of the project on full build-out, Applicant may release from the reserved lots the equivalent space of such reduction. The Modified Parking Plan shall replace the prior Parking Plan or Modified Parking Plan, as the case may be. Applicant shall have the right at any time to revise the Parking Plan or any Modified Parking Plan by substituting other lots for the reserved lots within the project site (subject to the review and approval of the Planning and Public Works Directors), by providing parking in one or more on-site parking garages or by using off-site facilities (subject to approval of a Special Use and Design Permits in accordance with Section 24.12.290.5 of the Zoning Ordinance) as long as the substitute lots or facilities provide the same amount of parking as the lots then in reserve. In addition, as development progresses beyond the 50% development buildout level, Applicant, at its own cost, shall have the right to further revise the Modified Parking Plan Project by having a parking analysis prepared of the parking demand based on current development at the time of the analysis, and projected build-out including any restrictions on uses. The analysis shall recalculate parking demands at the time of the analysis and be subject to review and approval by the Planning and Public Works Directors. Applicant shall provide a Revised Modified Parking Plan to reflect any reduction in parking demand based upon such analysis. Reserved lots within the Parking Plan or Modified Parking Plan shall not be sold or transferred unless released or developed for parking.

Section 4.6: Public Service and Utilities

Page 4-72; third paragraph and Table 4.6-1: Santa Cruz City School District Nearby Schools

As shown ~~in~~ on Figure 4.6- 2: Santa Cruz City School District Attendance Boundaries, the project site is located within the service area of the ~~Table 4.6-1: Santa Cruz City School District Nearby Schools,~~ Westlake Elementary School~~, Mission Hill Middle School and Santa Cruz High School~~. Westlake Elementary School along with the Mission Hill Middle School and Santa Cruz High School would directly serve future residents of the project site that have school-age children. As shown in Table 4.6-1 Santa Cruz City School District Schools Serving the Project, all three schools are currently under capacity and can accommodate 50, 152, and 467 new students, respectively. While the Bay View Elementary School is located nearer than the Westlake Elementary School, the project site is located outside of its district and will not be served by this school.

Table 4.6-1 Santa Cruz City School District ~~Nearby~~ Schools Serving the Project

School Name	Address	Distance from Site	Current Enrollment	School Capacity	% Of Capacity	Additional Student Capacity
Westlake Elementary	1000 High St	1.4 miles N	536	586	91	50
Mission Hill Middle	425 King St	1.4 miles NE	577	729	79	152
Santa Cruz High	415 Walnut Ave	1.25 miles NE	1,064	1,531	70	467
Source: Santa Cruz City School District (2007)						

Page 4-74; fourth paragraph; last sentence

A 500-unit residential development would use between approximately 26 and 42 million gallons per ~~day~~ year (~~MGD~~MGY) of water which exceeds the project water demand of approximately 21 ~~MGD~~MGY (as further described below). Thus, the City determined that a WSA, as required under State law, was not required for the proposed project.

Page 4-96; Mitigation Measures 4.6-3a

After the end of the public review period, the Applicant submitted to the City suggested changes to Mitigation Measure 4.6-3a. Although City Staff did not agree with all of the suggested modified language, Staff has revised the measure in order to accommodate some of the applicant's concerns and to make the measure better. As modified, the measure reads as follows

4.6-3a The Planned Development Permit ~~and Development Agreement~~ for the project shall include a condition requiring the City to consider, with each subsequent application for design or building permit approval for water-consuming development within the project site, whether the City's water supply situation has reached a point at which additional water hook-ups would require the imposition of a water connection moratorium because such additional hook-ups ~~the additional water demand created by the increment of development at issue~~ would either (i) substantially exacerbate the City's efforts to conserve water during drought conditions or (ii) preclude or make substantially more difficult the City's ability to provide reliable water service for existing customers and for properties within the City's water service area that, despite having received all necessary discretionary local entitlements to develop, have not yet developed to the point where they will require water service from the City. If the City determines that the additional water demand created by the increment of project development at issue would cause the City to reach the point where such a moratorium would be appropriate, ~~T~~the City shall deny the application for such water-consuming development within the project site ~~in the event that the City answers either such inquiry in the affirmative~~. This condition will expire by operation of law if and when the City receives all necessary regulatory approvals needed to construct and operate a desalination facility of the kind and scale contemplated by its Integrated Water Plan or the City has identified some other source or conservation strategy that provides the City with sufficient water supplies to serve all existing and planned development within its service area.

Additionally as previously indicated, in the event that a supplemental water source is required prior to operation of the planned desalination plant with capacity for additional growth, the City may be in the position of denying new water connections to all users, until such time as a supplemental source is completed.

Section 4.8: Biological Resources

Page 4-106; last full paragraph; first sentence

The *Management Plan*, as modified by the Coastal Commission specifies a 30-foot wide riparian corridor, a ~~80-foot~~ 50-foot wide development setback (for a total riparian/development setback width of 80 feet), and a 105-foot management area (each

measured from the centerline of the creek) for Reach 3 and a 50-foot wide riparian corridor, a 70-foot development setback, and a 95-foot management area for Reach 4. Section 5: CEQA Considerations.

Page 4-109, Mitigation 4.8-1a

4.8-1a Prior to approval of the Vesting Tentative Map, the project applicant shall submit to the City for approval, a site plan that has been modified to eliminate parking and building areas that encroach into the 70- and 80-foot development setbacks as set forth in the *City-wide Creeks and Wetlands Management Plan*. Since circulation of the Draft EIR, the applicant has agreed to modify the site plan.

Page 4-110, Mitigation 4.8-2b

4.8-2b Implement erosion control measures, including, but not limited to:

- ❑ Limiting ground disturbance and vegetation removal at any one time during construction and installation of drainage improvements.
- ❑ Require temporary fencing on the western edge of the site during construction to prevent inadvertent erosion, sedimentation, and/or construction debris from entering the adjacent riparian area or Arroyo Seco Creek. Prohibit construction activities, placement of spoils, and storage of materials and machinery in the setback.
- ❑ Provide adequate erosion control protection in the area of the drainage outlets, such as use of silt fences, straw bale barrier or other protective measures.
- ❑ Conduct grading work prior to the rainy season unless otherwise permitted by and in accordance with the City's Grading Ordinance, except for installation of the storm drain outlets as addressed below; protect disturbed areas during the rainy season; and contain and/or properly de-water accumulated construction-related runoff from disturbed areas or excavated areas.
- ❑ Restrict the timing of installation of the drainage outlets to the periods outside the rainy season (generally June 1 – September 30).
- ❑ Immediately revegetate disturbed areas. Apply weed-free mulch or revegetate all soil exposed as a result of the proposed grading before November 1st of each year.

Section 5.2: Growth Inducement

Page 5-1, last paragraph; third sentence

Based on the City's average household size of 2.4, the first portion of project buildout would result ~~would result~~ in approximately 122 residents.

Section 5.7.22: Alternative 2 Impacts,

Page 5-44, Traffic section

For proposes of analysis of transportation and traffic impacts under this alternative, a development scenario of all industrial development was assumed; namely 370,000 square feet of commercial/industrial use with no residential units or retail uses. Project trip assignments and distribution for each land use remain the same those used for the proposed project, as were reductions for internal trips between uses (e.g. office and warehouse) ~~and work/live unit trips~~.

Section 5.7.22: Alternative 3 Impacts

Page 5-48, last paragraph

The proposed project would result in long-term stationary and vehicular emissions, but would not exceed the MBUAPCD thresholds. Long-term operational air quality impacts would be less than the proposed project. ~~The reduction in square footage would result in a corresponding reduction in stationary source emissions. Furthermore, because this alternative would not include any residential housing, the total number of daily vehicle trips (2,939 trips) would be reduced by 2,190 (43 percent).~~ As a result, long-term vehicular emissions under this alternative would be less than those for the proposed project.

Page 5-50, first paragraph, Level of Service Analysis, and Table 5-12

Alternative ~~1~~ 3 would generate ~~2,939~~ 3,071 daily trips, ~~2,190~~ 2,322 fewer trips (43 ~~40~~ percent) as compared to the proposed project (see Table 5-12: Alternative 3 – Trip Generation). AM and PM Peak hour trips would be reduced by ~~129~~ 101 trips (20 ~~24~~ percent) and ~~177~~ 165 trips (29 ~~31~~ percent) respectively, as compared to the proposed project.

Table 5-12: Alternative 3 – Trip Generation

	Alternative 3		
	Weekday Daily Trips	AM Peak Hour	PM Peak Hour
Warehouse	161	15	15
Light Manufacturing	124	24	24
Research and Development	924	141	123
Office	1,694	264	253
Retail	0	0	0
Total Industrial/Commercial	**2,903**	**444**	**415**
Residential: flats	~~0~~ 517	~~0~~ 39	~~0~~ 48
Residential: work/live townhouses/flex units	~~793~~ 276	~~60~~ 21	~~73~~ 25
Total Residential	**793**	**60**	**73**
Work/live Reduction (30%)	~~-238~~ -83	~~-18~~ -6	~~-22~~ -8
Internal Trip Reduction (15%)	~~-519~~ -542	~~-73~~ -75	~~-70~~ -72
Total Trips	**~~2,939~~ 3,071**	**~~413~~ 423**	**~~396~~ 408**

Source: RBF Consulting, 2008.

Figures

- ❑ Figure 4.2-1: Proposed Curtain Drain Locations **REVISED**
- ❑ Figure 4.3-1: Projected Groundwater Contours with Curtain Drain **NEW**
- ❑ Figure 4.3-2: Barrier to Groundwater Flow from Eklof Site **NEW**
- ❑ Figure 4.6- 2: Santa Cruz City School District Attendance Boundaries **NEW**

Appendices

Appendix C: Project Design Guidelines

The Design Book, which was erroneously included in the Draft EIR, was replaced with the revised project Design Guidelines.

Appendix H: Traffic Impact Analysis Exhibits

Exhibit 5; page 8 and 9

Exhibit 5 - Level of Service on pages 8 and will be corrected to state: Exhibit 5: Alternative 3 Level of Service.

Exhibit 5 Level of Service on page 9 will be corrected to state: Exhibit 5: Project Buildout - Worst Case Scenario Level of Service.

Exhibit 8

Include Trip Generation Buildout Table that was inadvertently omitted in the DEIR.

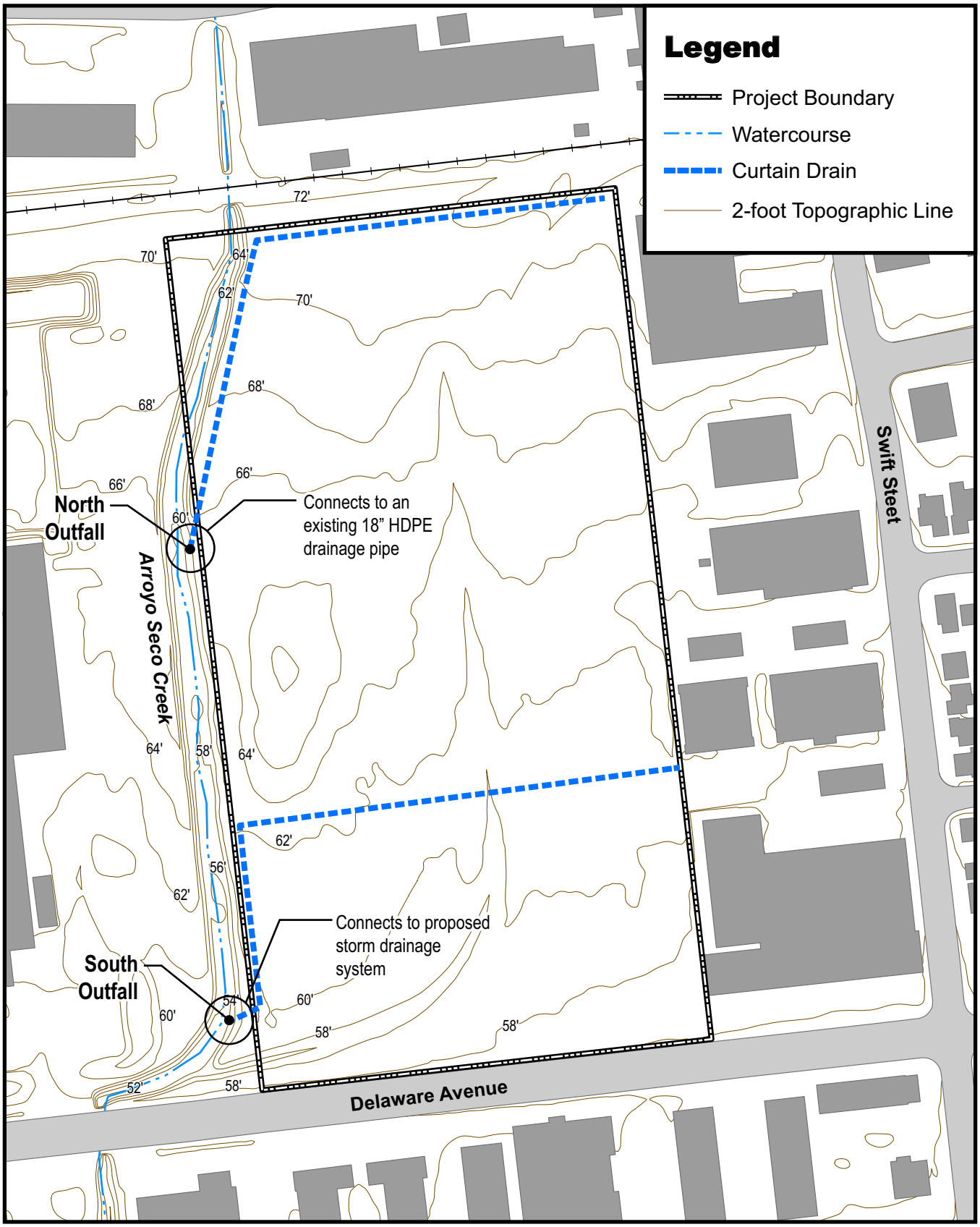
Exhibit 8

Alternative 2 table corrected to eliminate retail uses.

Exhibit 13c

The Final EIR text has been clarified for weekday PM peak hour volumes for total short- plus long-term development in 2006 to show 3,110 as opposed to ~~31,110~~.

REVISED FIGURES



Source: City of Santa Cruz (2006) and Bowman & Williams (2007)

RBF CONSULTING

N

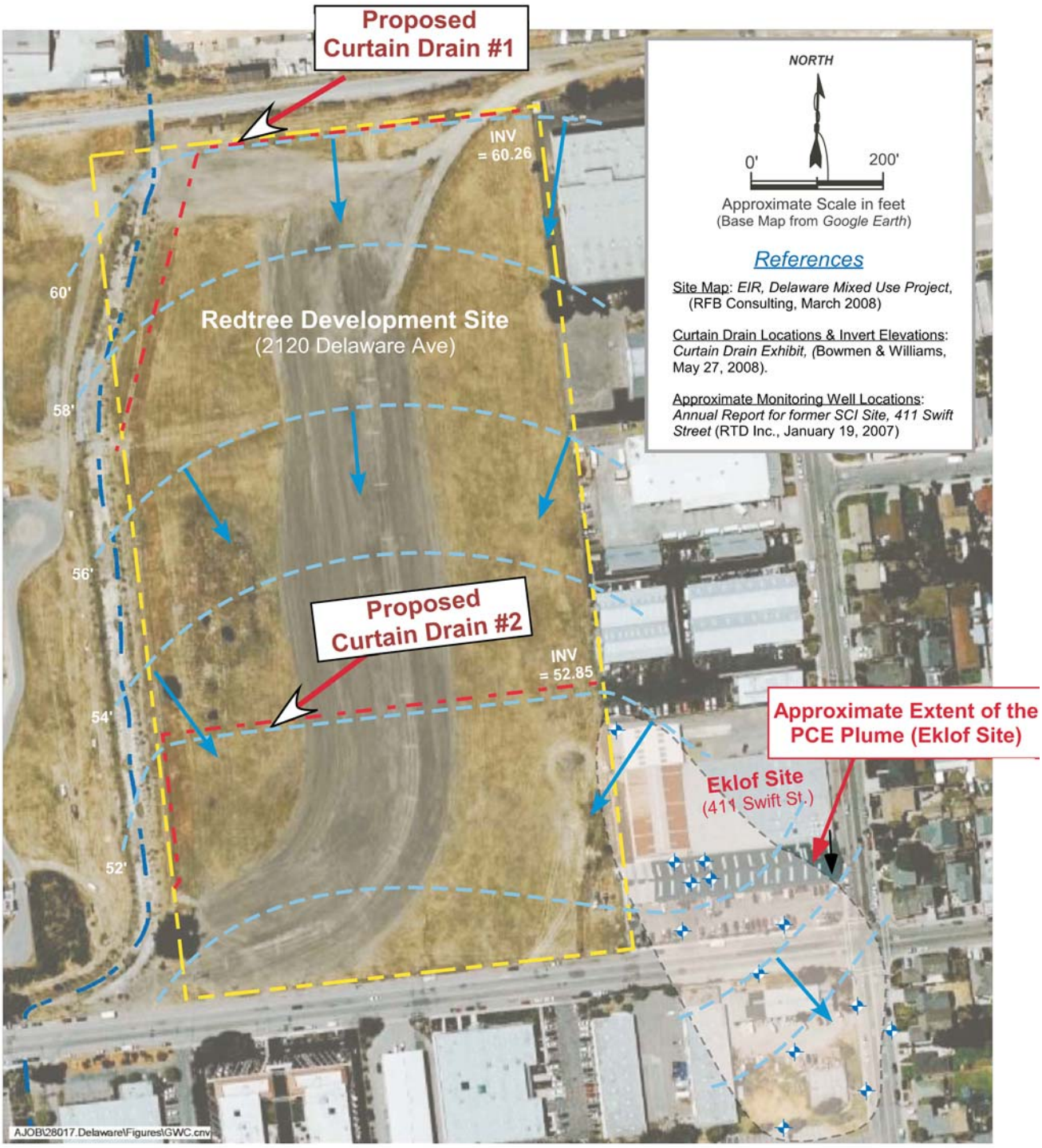
0 50 100 200 Feet

12/18/07 JN 70-100058

2120 DELAWARE MIXED USE PROJECT EIR

Proposed Curtain Drain Locations

Figure 4.2-1



Source: RBF Consulting (2008), Bowmen & Williams (2008), and RTD Inc. (2008)

RBF CONSULTING

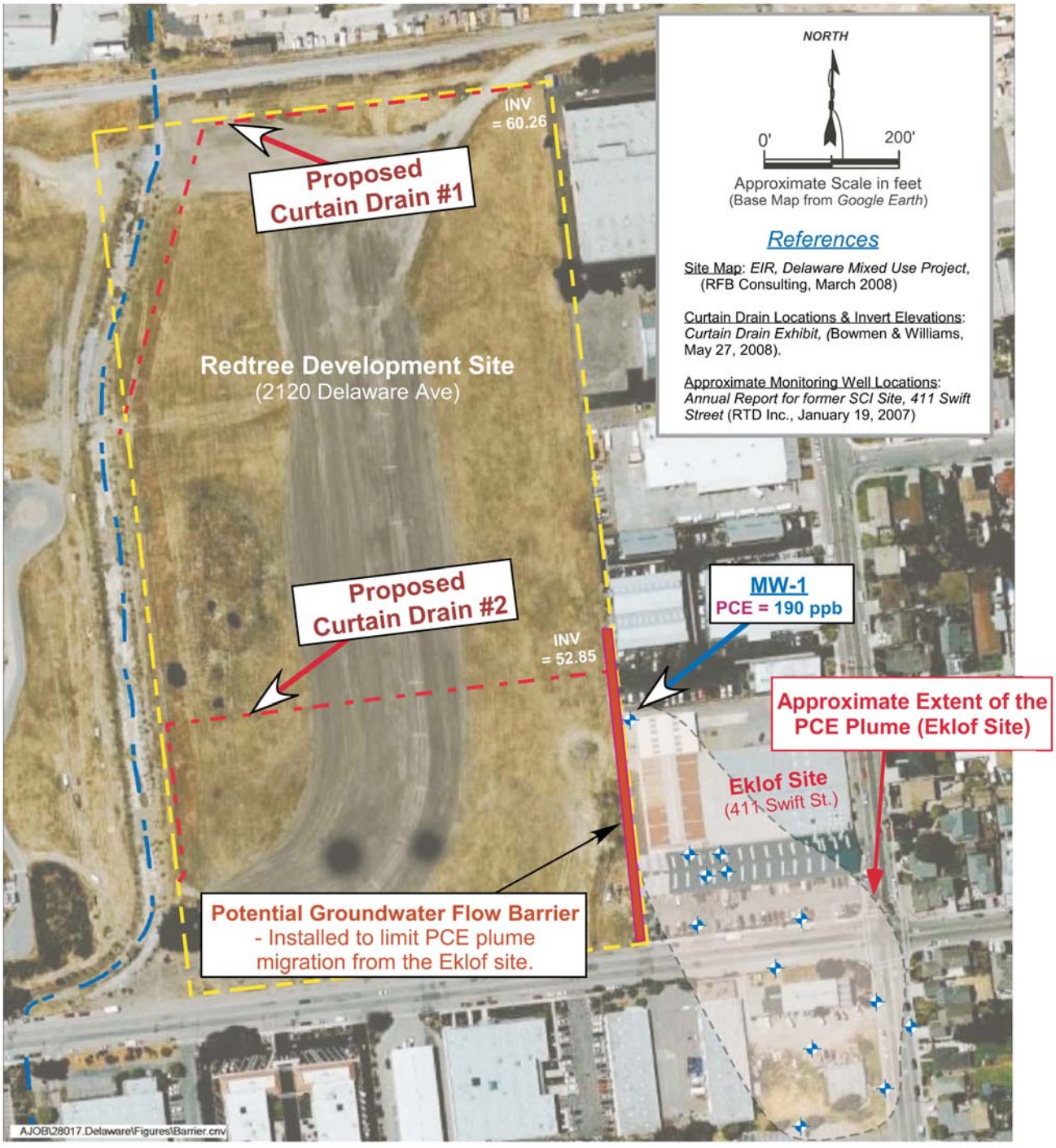
0 100 200 Feet
APPROXIMATE

6/11/08 JN 70-100058

2120 DELAWARE DEVELOPMENT PROJECT EIR

Projected Groundwater Contours with Curtain Drain

Figure 4.3-1



Source: RBF Consulting (2008), Bowmen & Williams (2008), and RTD Inc. (2008)

RBF CONSULTING

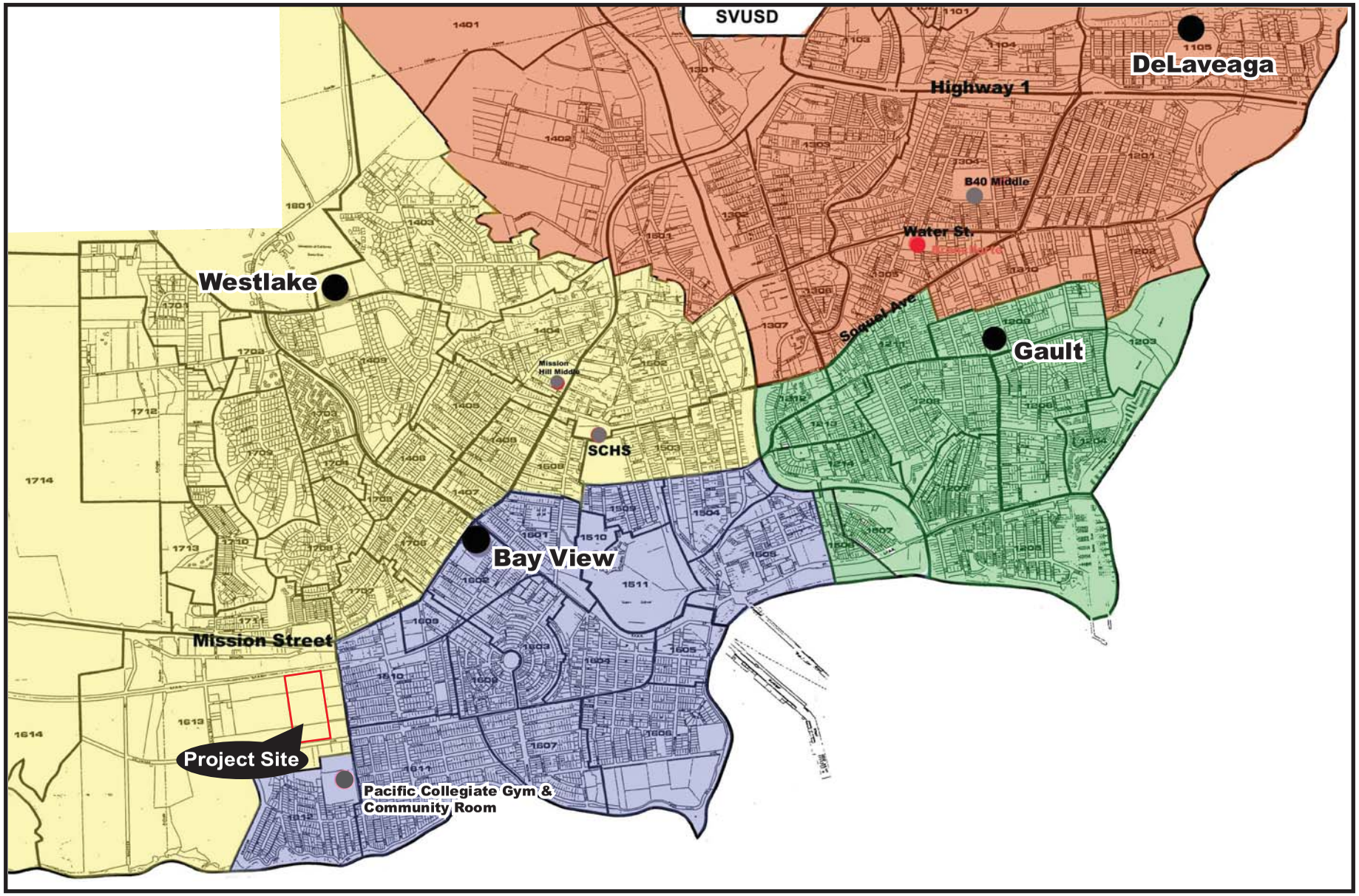
0 100 200 Feet
APPROXIMATE

6/11/08 JN 70-100058

2120 DELAWARE DEVELOPMENT PROJECT EIR

Barrier to Groundwater Flow from Eklof Site

Figure 4.3-2



Source: Santa Cruz City School District (2008)

RBF CONSULTING

06/02/2008 JN 70-100058

2120 DELAWARE MIXED-USE PROJECT EIR

Santa Cruz City School District Attendance Boundaries

Figure 4.6-2

Appendix C
DESIGN GUIDELINES and CC&Rs

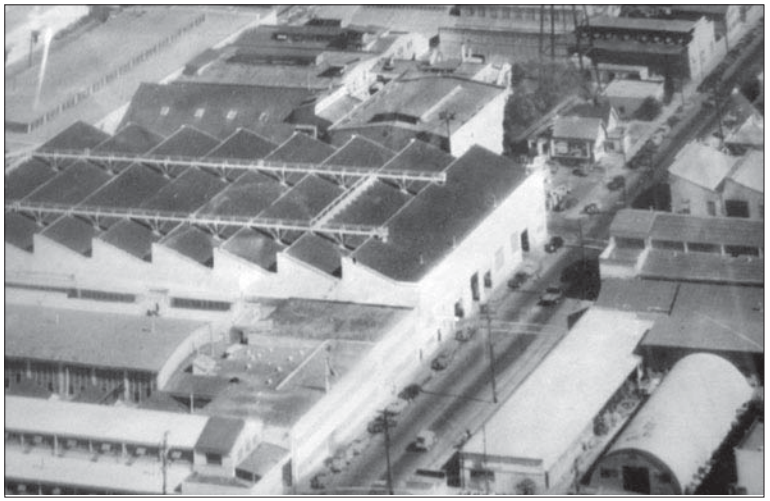
Revised
Red Tree Design Guidelines

D E L A W A R E *a d d i t i o n*

draft 3: 12 April 2006 s a n t a c r u z , c a l i f o r n i a

Great cities have quarters or districts, distinct in architecture, inhabitants or activities pursued. The Delaware Project will create the core of a vibrant Westside Industrial District - a diverse community of small local businesses and entrepreneurs that combines the ingenuity and innovation of our well-educated workforce with the commitment and dedication of local business.

DESIGN GUIDELINES



It takes flexibility, innovation and efficiency to grow a business.
It takes tolerance, generosity and commitment to sustain a community.

OWNER

Redtree Properties, L.P
Craig French, Managing Director
1362 Pacific Avenue
Santa Cruz, CA 95060
831.427.1900

ARCHITECT

Mark Primack
521 Swift Street
Santa Cruz, CA 95060
831.426.9340

LANDSCAPE ARCHITECT

Janet Pollock
521 Swift Street
Santa Cruz, CA 95060
831.426.9340

CIVIL ENGINEER

Bowman Williams
Consulting Civil Engineers
1011 Cedar Street
Santa Cruz, CA 95060
831.429.9030

D E L A W A R E *a d d i t i o n*

santa cruz, california

DESIGN GUIDELINES

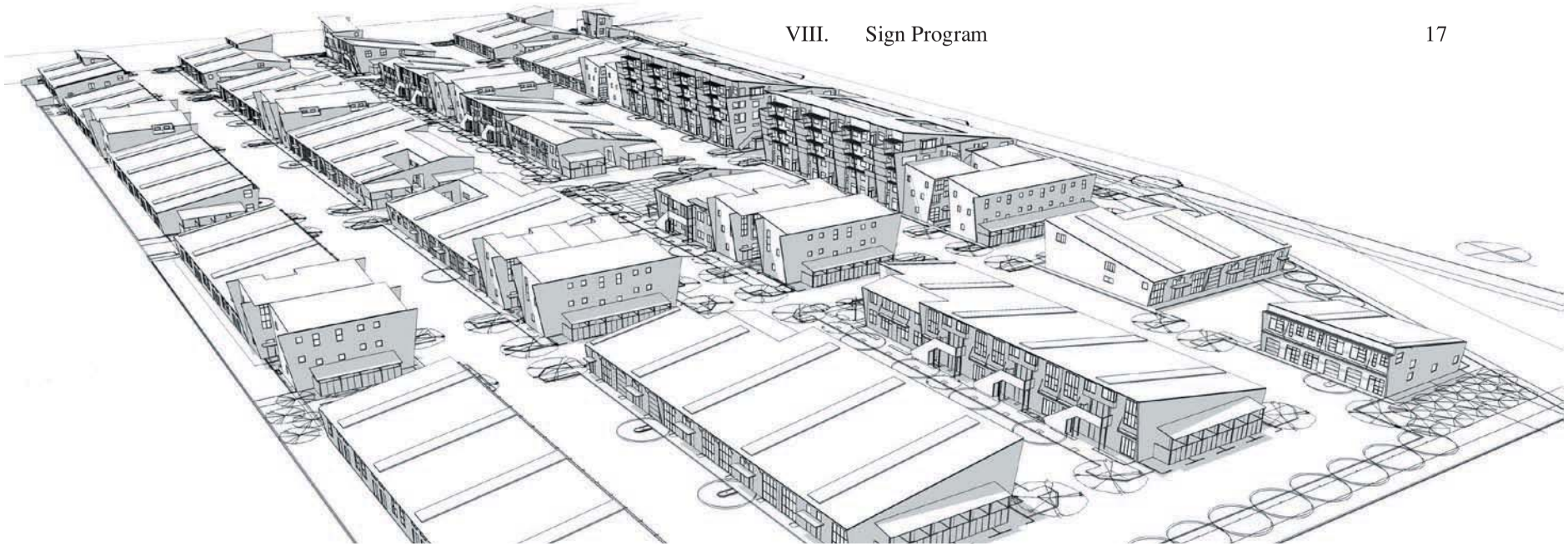


Table of Contents

I.	Introduction		
	A.	Goals and Objectives	1
	B.	Site Organization	2
II.	Streetscape		
	A.	Main Avenues	3
	B.	Service Roads	4
	C.	Utility Streets	5
	D.	Pedestrian Lanes	7
	E.	Delaware Avenue	8
	F.	Central Plaza	9
	G.	Transit Plaza	10
IV.	Landscape Design		11
V.	Building Design		13
VI.	Green Building		15
VII.	Parking		16
VIII.	Additional Considerations		16
VIII.	Sign Program		17

Project Goals & Objectives

Santa Cruz, Lower Westside









Interesting cities have districts distinct in architecture, inhabitants or activities pursued. We are creating the core of a vibrant new Industrial District - a balanced neighborhood of small local businesses and entrepreneurs, paired with live/work and workforce housing, adjacent to traditional residential neighborhoods, transit, shops and recreational areas.

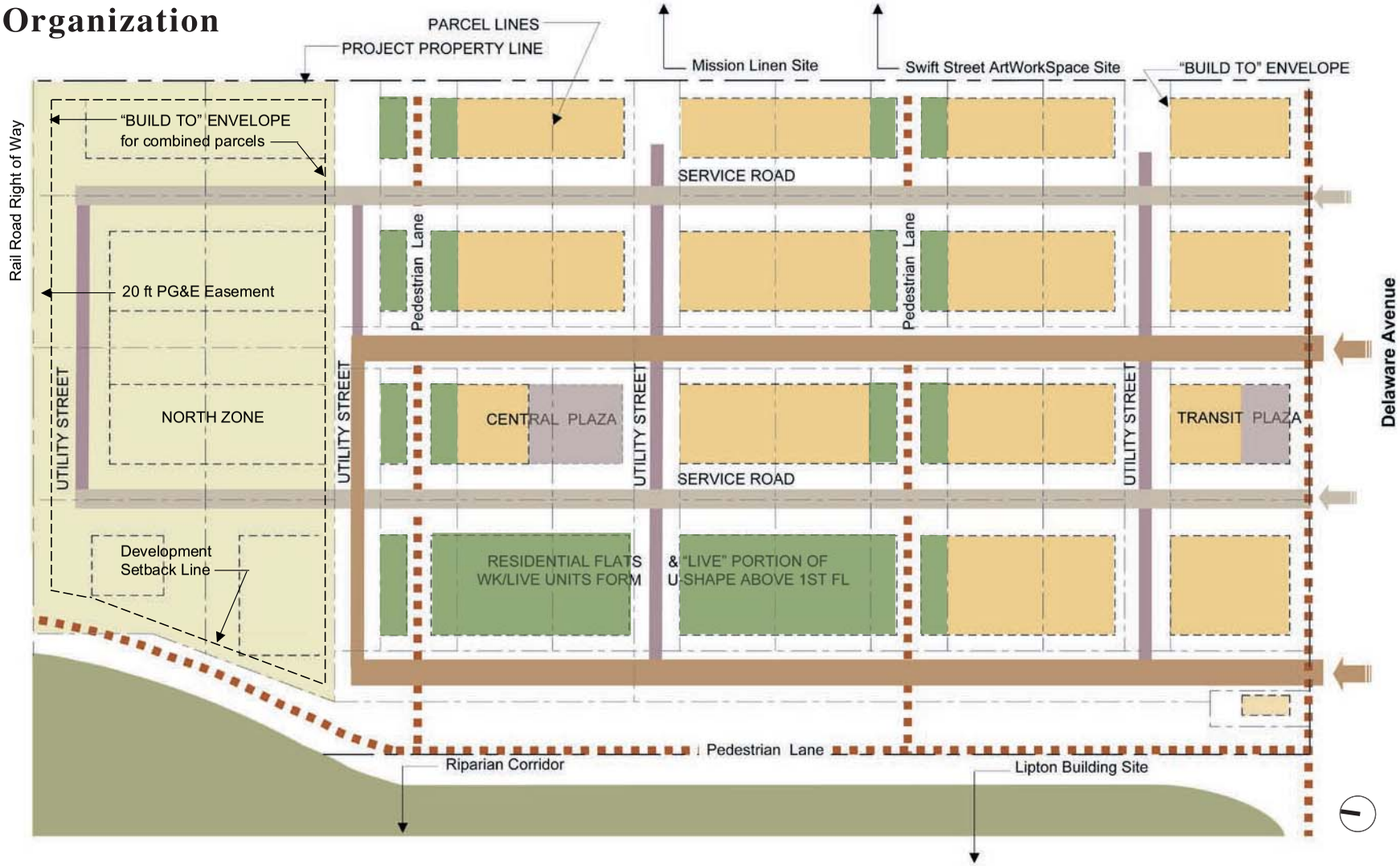
The Delaware Addition is located on a long vacant 20-acre industrial site that was intended as an expansion area for a corporate manufacturer that recently opted to go offshore. Surrounded by industrial uses and accessed from Delaware Avenue, the property is zoned General Industrial, which allows industrial, commercial and residential uses.

Economic sustainability requires both profit AND productive jobs, anchored within a healthy community. Our project acknowledges and accommodates the ingenuity and innovation of a well-educated workforce, and the commitment and dedication of local business people. It is a phased project that will grow for and with the local economy.

The site will be developed as an industrious neighborhood with a diverse mix of businesses and residents (maximum build-out of 536,000 square feet, including as many as 248 dwellings). The site plan encourages a sense of community among a wide range of users, while preempting potential conflicts. Pedestrian-oriented avenues, plazas and gardens will be accessible to all. The designs of the various buildings are intended to both provide affordable and flexible space for new and growing businesses, and to create a lively architectural environment.

The planned development process provides Santa Cruz an alternative to zoning and planning regulations that discourage business initiative and often result in revenue starved bedroom communities. In contrast, the Delaware Addition will provide a foothold for diversity, sustainability and pride of place, serving as an incubator for the green industries the city hopes to grow.

Site Organization



Four different types of roadways organize the site: Avenues, Service Roads, Utility Streets and Pedestrian Lanes. They are differentiated by their use, landscaping and vehicular accommodation.

Avenues and Service Roads run north - south, providing access to the site from Delaware Avenue. Utility Streets and Pedestrian Lanes run east - west. Avenues serve the entrances to businesses, and are designed as traditional tree lined "Main Streets." Service vehicles are directed through the site via Service Roads, which also accommodate the majority of parking. Utility Streets provide access to sheds and enclosures attached to the north sides of buildings. These utility sheds house service distribution panels and meters, trash and recycling facilities, and provide secure bicycle storage. Pedestrian Lanes are quiet landscaped passages, removed from vehicular traffic and lined with work/live structures that form residential neighborhoods within the district.

North Zone

Within set project requirements for parking, building area and building use, parcels in the North Zone may be reconfigured to accommodate larger building footprints and their resultant parking needs. In doing so, existing street patterns shall be modified and easements negotiated on a case-by-case basis.

Streetscape

Main Avenues: Avenue Tea & Avenue Sea

Avenue Tea looking North

The two avenues that serve the entrances to businesses are designed as a traditional 'main streets', lined with parallel parking spaces, generous sidewalks, substantial high branching street trees, and few, if any, driveway curb cuts to interrupt pedestrian flow.

All of the industrial condominiums lining both Avenues will be a minimum of two stories tall. Several of them will have stairways rising up from the sidewalk to give independent access to second floor flex spaces associated with each of the units, which owners have the option of converting into studio apartments.

At key intersections of Avenues and Utility Streets, buildings may step back to create informal social spaces for workers and residents that accommodate grouped mailboxes and benches.

1. "Build To" Lines
   a. Parcel lines along the two Avenues (**Avenue Tea and Avenue Sea**) begin at the back of curb.
   b. Buildings shall be set back a total of 16 feet from the parcel lines to accommodate:
      - an 8 feet sidewalk zone which includes street trees
      - an additional 8 feet front yard as illustrated in the Streetscape/Landscape drawings.
   c. Building entries, exterior stairways and garden walls (not to exceed 30 inches in height) may extend into the planting zone and up to the inside edge of the sidewalks
   d. Arbors and canopies with 8 feet minimum clearance may extend over the sidewalks.
   e. Refer to drawings on Sheets L1 through L3 and A1 for detail information.

2. Plant Materials and Hardscape
   Plant and landscape materials shall comply with master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 for detail information.

3. Lighting
   a. All building entrance illumination shall be:
      - wall mounted, or incorporated into canopies and/or stairways
      - linked to timers
      - designed to provide a comfortable level of safety and security
   b. Retail lighting for signage and display will be permitted
   c. Any additional fixtures located within the planting zone are to be kept below 36 inches in height
   d. Pole lighting will be provided as part of street improvements (refer to Sheet A1 for street lighting locations)

4. Architectural considerations
   a. Buildings fronting the Avenues are to be a minimum of 2 stories or 24 feet tall.
   b. All entries are to be protected through the use of recesses, canopies or other horizontal projections.
   c. Building facades shall be designed to support climbing and clinging vines and espaliered trees.

Streetscape

Service Roads: High Road & Hard Road

High Road looking North

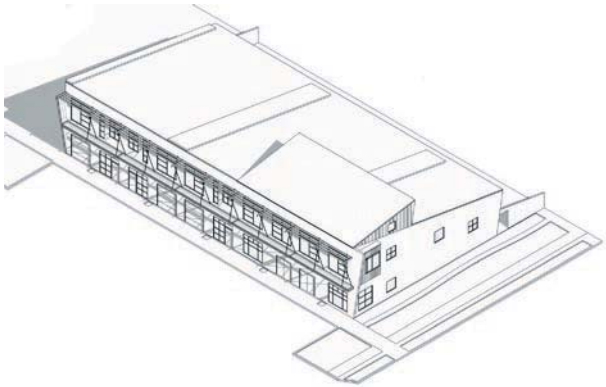
The majority of parking and all truck traffic will be directed along mid-block service roads that run north - south. Building canopies typical of early industrial architecture will protect roll-up doors and full-height windows that open onto these roads. The sidewalk along these service roads will be punctuated with vine wells and strategically placed trees, pruned high to avoid damage from trucks.

1. "Build To" Lines
   a. Parcel lines along Service Roads extend to the center of the roadways.
   b. Buildings shall be set back a total of 37 feet from Parcel Lines to accommodate:
      - 12 feet of access road easement
      - 19 feet required for perpendicular parking
      - and 6 feet of sidewalk
   c. Canopies and trellises with a minimum of 8 feet clearance projecting over the width of the sidewalk are permitted and encouraged
   d. Refer to drawings on Sheets L1 through L3 and A1 for detail information.

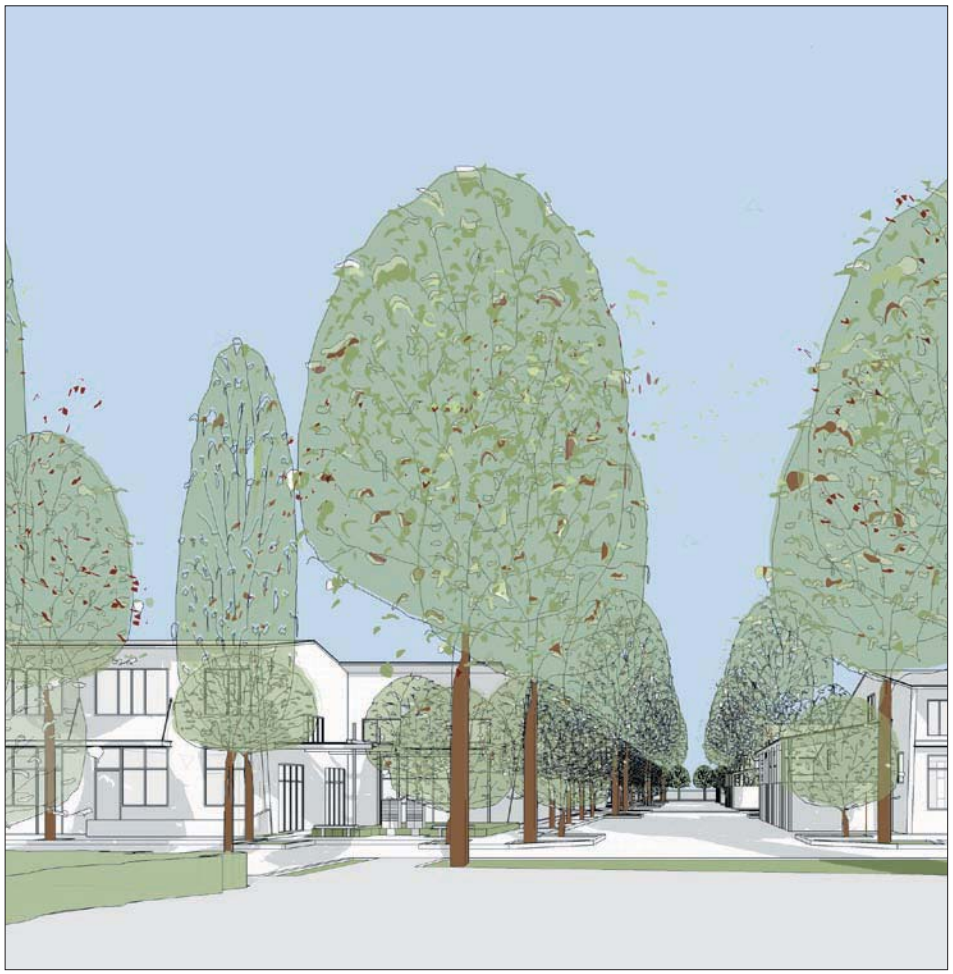
2. Plant Materials and Hardscape
   Plant and landscape materials shall comply with master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 for detail information.

3. Lighting.
   a. All building illumination shall be:
      - wall mounted, or incorporated into canopies
      - linked to timers
      - designed to provide a comfortable level of safety and security
   b. Pole lighting will be provided as part of street improvements (refer to Sheet A1 for of street lighting locations).

4. Architectural considerations
   a. No minimum building height.
   b. Canopies to protect building entrances and roll-up doors as well as provide support to plant materials are encouraged.
   c. Building facades shall be designed to support climbing and clinging vines and espaliered trees.



Utility Streets: Easy Street, Side Street & Back Street



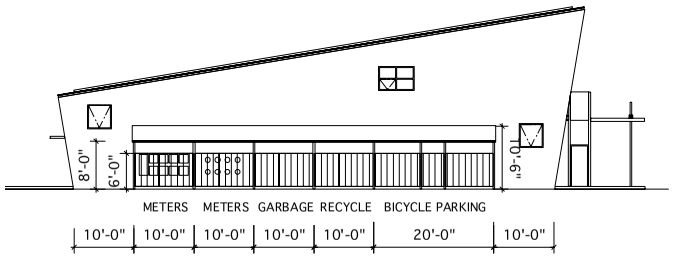
Typical Utility Street looking East

The first of two types of cross-streets proposed for the Delaware Project, the tree lined Utility Streets will accommodate truck circulation as well as parallel parking on the north side. Utility sheds, attached to the north face of buildings and designed with materials consistent with the adjacent building, will include service distribution panels and meters for water and power, trash and recycling facilities, and secured bicycle storage.

At key intersections of the Utility Streets and Avenues, buildings may step back to create informal social spaces for workers and residents that accommodate grouped mailboxes and benches.

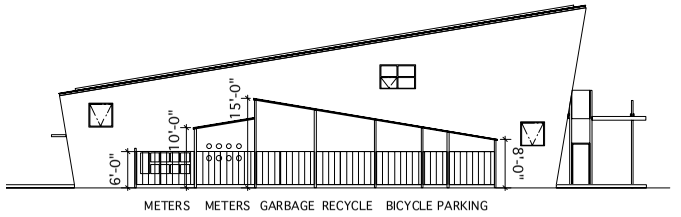
1. "Build To" Lines
   a. Parcel lines along the North side of Utility Streets begin at the outside edge of the sidewalk.
   b. Buildings on this north side shall be set back 10 feet from the parcel lines to accommodate:
      - a 6 sidewalk
      - plus a 4 feet planting zone adjacent to the building
   c. Projections with a minimum of 8 feet clearance over the width of the planting zone are allowed.
   d. The parcel line along the South side of the street is the "Build To" line.
   e. Refer to drawings on Sheets L1 through L3 and A1 for detail information.

2. Utility Sheds
   a. Sheds occur within the street parcel and shall be:
      - a maximum of 14 feet in depth
      - incorporated into the adjacent building design
      - customized to the needs of the businesses served
   b. Utility Shed designs may vary to accommodate the adjacent building design and the utility requirements of buildings served.
   c. Utility Sheds may follow (but are not limited to following) any of the six design configurations illustrated below.



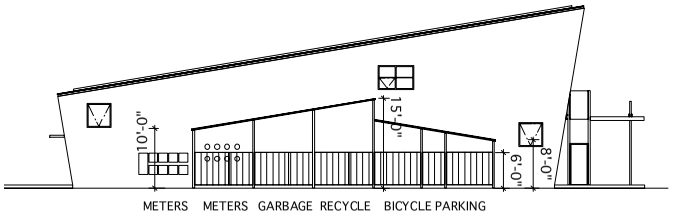
type 1

(Typical Dimensions)

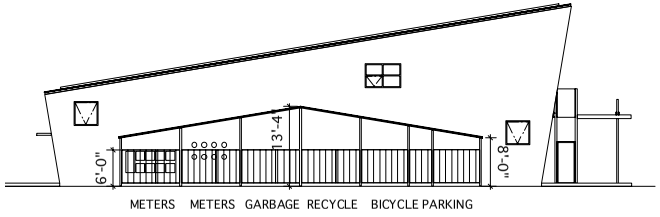


type 2

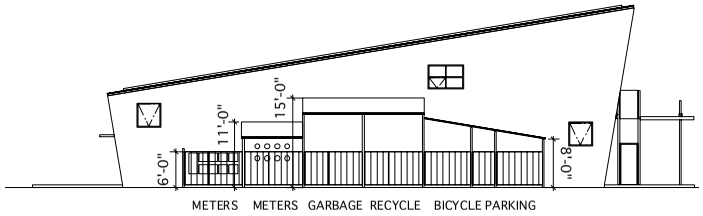
Utility Streets: Easy Street, Side Street & Back Street



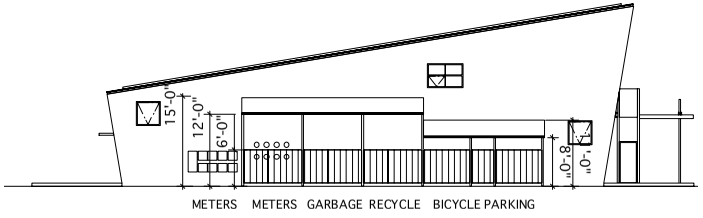
type 3



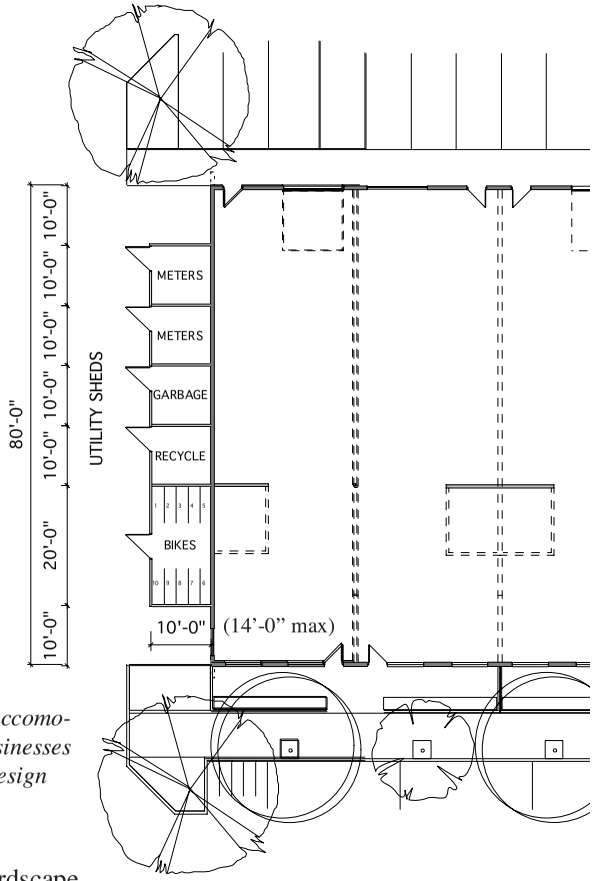
type 4



type 5



type 6



Typical Utility Shed Layout

Note: layout may vary to accomodate utility requirements of businesses served and adjacent building design

3. Plant Materials and Hardscape
   South facing walls of buildings along the north side of utility streets shall support fruiting vines and espaliered fruit trees and shall comply with master Streetscape/ Landscape drawings. Refer to Sheets L1 through L3 for detail information.

4. Lighting
   a. All building illumination shall be:
      - wall mounted,
      - linked to timers
      - designed to provide a comfortable level of safety and security
   b. Any additional fixtures located in the planting zone are to be kept below 36 inches in height.

5. Architectural considerations
   a. No minimum building height.
   b. In areas of southern exposure, projections providing sun control and building facades designed to to support climbing and clinging vines and espaliered trees are encouraged.

Streetscape

Pedestrian Lanes: Fast Lane & Slow Lane

Typical Pedestrian Lane at Work/Live Townhouses

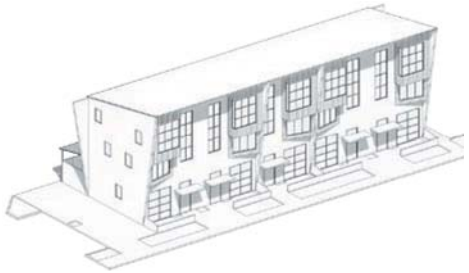
Three story Work/Live Townhouses line the two Pedestrian Lanes forming protected residential neighborhoods within the district. These quiet, landscaped passages, removed from vehicular traffic, afford green paths across the site from east to west, connecting pedestrians to outdoor sitting areas and the walkway along the Arroyo Seco riparian corridor that then continues to Natural Bridges State Park and Beach, and Long Marine Lab, to the west.

1. "Build To" Lines
   a. Work/Live Townhouses shall be set back 12 feet 6 inches from the centerline of the parcel to accommodate:
      - a 10 feet easement for the Pedestrian Lane that bisects the 77 feet width of the parcels and includes a 5 feet wide walkway to the south and landscaped zone to the north
      - A semi private "front yard" for the Townhouses
   b. Arbors, garden walls (not to exceed 30 inches in height) and canopies may project into these "front yards."
   c. Refer to drawings on Sheets L1 through L3 and A1 for detail information.

2. Plant Materials and Hardscape
   Plant and landscape materials shall comply with master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 for details information.

3. Lighting
   a. All building illumination shall be:
      - wall mounted, or incorporated into canopies
      - linked to timers
      - designed to provide a comfortable level of safety and security
   b. Pole lighting at the intersection of Pedestrian Lanes and Streets and Pedestrian Lanes and Avenues will be provided as part of street improvements (refer to Sheet A1 for of street lighting locations).
   c. Any additional fixtures located in the planting zone are to be kept below 36 inches in height.

4. Architectural considerations
   a. Buildings along Pedestrian Lanes shall be a minimum of 2 stories tall.
   b. In areas of southern exposure, projections providing sun control and building facades designed to support climbing and clinging vines and espaliered trees are encouraged.



Streetscape

Delaware Avenue

Delaware Avenue looking West

Delaware Avenue is the public face of the project. A parkway design along the entire street frontage takes full advantage of this area's direct southern exposure and act as a counterpoint to its relatively wide expanse, providing a gentle separation between the more formal public zone of the street, that includes the sidewalk and high branching street trees lining the roadway, and the semi private zone of the development in which informal rows of edible hedges and vines, punctuated by fruit trees, screen the buildings from traffic.

1. "Build to" Lines
   Buildings fronting on Delaware Avenue will be set back 20 feet (per IG zoning).

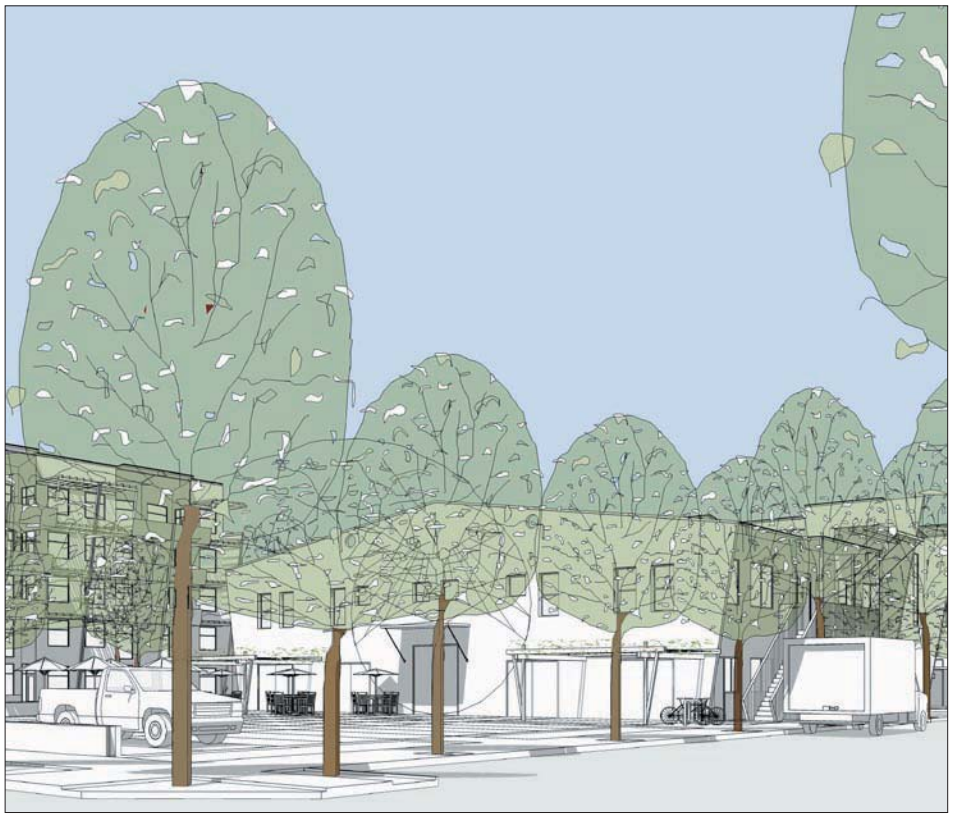
2. Plant Materials and Hardscape
   Plant and landscape materials shall comply with master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 for details information.

3. Lighting
   a. All building entrance illumination shall be:
      - wall mounted, or incorporated into canopies and/or stairways
      - linked to timers
      - designed to provide a comfortable level of safety and security
   b. Retail lighting for signage and display will be permitted
   c. Any additional fixtures located in the planting zone are to be kept below 36 inches in height.
   d. Pole lighting will be provided as part of street improvements (refer to Sheet A1 for of street lighting)

4. Architectural considerations
   a. Building height is encouraged to establish presence of the development along this public edge.
   b. Projections providing sun control and building facades designed to support climbing and clinging vines and espaliered trees are encouraged.

Streetscape

Central Plaza



Central Plaza looking Northwest

At the heart of the district stands a plaza similar to those found in small European towns. This flexible space will be available for community events such as company barbecues, seconds sales, street fairs, block parties and weekend gatherings for residents.

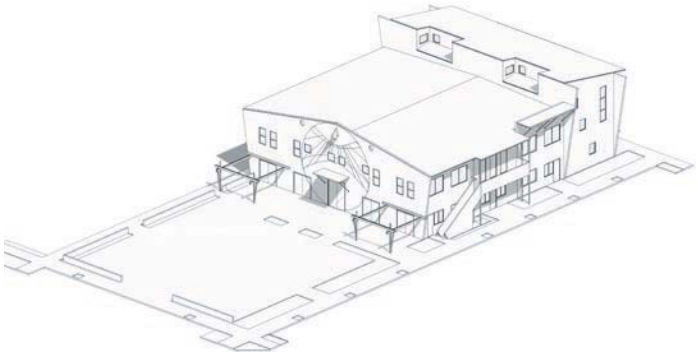
A 20 feet wide retail extension along the south face of the adjacent building, defined by vine-covered arbors, will serve ground floor businesses. The open space of the plaza will provide weekday parking, following the European model.

1. "Build To" Lines
   a. The building on the parcel directly adjacent and north of the Central Plaza shall be set back 17 feet to form, along with an additional 3 feet of the Plaza, a 20 feet retail extension to serve ground floor businesses.
   b. Canopies, arbors and sun control devices with a minimum clearance of 8 feet are all allowable projections within this 17 feet setback.

2. Plant Materials and Hardscape
   Plant and landscape materials shall comply with master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 and A1 for detail information.

3. Lighting
   a. All building illumination shall be:
      - wall mounted, or incorporated into canopies
      - linked to timers
      - designed to provide a comfortable level of safety and security
   b. Retail lighting for signage and display will be permitted
   c. Any additional fixtures located in the planting zone are to be kept below 36 inches in height
   d. Plaza lighting and pole lighting will be provided as part of street improvements (refer to Sheet A1)

4. Architectural considerations
   a. 2 story minimum building height.
   b. Projections providing sun control and building facades designed to to support climbing and clinging vines and espaliered trees are encouraged.
   c. Sun dial shall be incorporated as a public amenity into the South facade of the building.



Streetscape

Transit Plaza

View from Delaware Avenue looking northeast

View from Plaza looking towards Delaware Avene and Avenue Tea

Located on Delaware Avenue and Avenue Tea, the Transit Plaza is the implicit gateway to the project. First floor businesses located on the Transit Plaza include exterior program components to take advantage of this public amenity and favorable southern orientation.

In the event that the Metropolitan Transit District locates a bus stop at this location, the building will accommodate a convenient and comfortable sheltered waiting area.

1.. "Build To" Lines
   a. To provide for future flexibility, the southern "build to" line for this parcel will extend to the setback for Delaware Avenue (20 feet, per IG zoning),
   b. However, the building footprint on this parcel shall be set back an additional 47 feet to define the open space of the Transit Plaza.
   c. Within this 47 feet setback, 480 square feet of enclosed space is permitted as in an area of 480 square feet covered by upper floors.
   d. Canopies, freestanding trellises and arbors within the Plaza are encouraged.

2. Plant Materials and Hardscape
   Plant and landscape materials shall comply with master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 for details information.

3. Lighting
   a. All building illumination shall be:
      1) wall mounted, or incorporated into canopies
      2) linked to timers
      3) designed to provide a comfortable level of safety and security
   b. Retail lighting for signage and display will be permitted
   c. Any additional fixtures located in the planting zone are to be kept below 36 inches in height
   d. Plaza lighting and pole lighting will be provided as part of street improvements (refer to Sheet A1)

4. Architectural considerations
   a. Building height is encouraged to establish a street presence at this gateway to the project.
   c. Projections and freestanding trellises within the Plaza to provide sun control as well as support to plant materials are encouraged.

Landscape

Landscape Plan
(shown for reference only - refer to Sheets L1 through L3 for detail information)

Transverse Site Section A-A

Landscape Design

The Delaware Addition emphasizes a commitment to both a pedestrian friendly streetscape and urban agriculture. Landscaping will define and enhance communal areas as well as spaces associated with individual businesses and residences. Our sustainable design incorporates low or zero water consumption and recognizes the importance of large trees in lowering the heat sink effect of paved areas.

Landscaped areas of large projects often devolve into joyless, mow-blow-and-go dead zones over time. The Delaware Project models landscape design and maintenance on the principles of livable landscapes and community supported agriculture. Landscaping for individual buildings shall comply with the master Streetscape/Landscape drawings. Refer to Sheets L1 through L3 for detail information.

1. Edible Landscape
   a. Edible vines and espaliered fruit trees may be grown on and against south facing walls.
   b. Semi dwarf fruit trees will be planted in areas where fallen fruit will not impede pedestrians.
   c. Plants such as dwarf citrus, pineapple guavas and artichokes may serve as hedges and ornamental shrubs in the landscape.
   d. Owners Association landscape fees will pay for trained horticultural workers and reap shares of chestnuts, apples, pears, kiwis and avocados.

2. Open Space.
   a. Residential Flats and Work/live units will have between 50 and 500 square feet of private open space.
   b. Garden Walls & Fences
      The Delaware Project will not be a gated community, however, garden walls (30 inches maximum) may be used to define private exterior space directly adjacent to business or work/live entrances and rear yards. In addition, taller fences may be proposed when security is an overriding concern.
      1) Garden walls shall be not exceed 30 inches in height
      2) Fences along the development's boundary lines shall be up to 6 feet tall.
      3) Security fences and gates up to 8 feet in height may be permitted upon review and approval by the Master Ownership Association.
   c. Mailboxes
      Mailboxes will be located in several key common areas of the development. Refer to Sheet A1 for locations.
   d. Canopies, Trellises & Arbors
      Projections providing sun control and building facades designed to support climbing and clinging vines and espaliered trees are encouraged. Refer to pages 13 and 14 for Building Design Guidelines.
   e. Tables & Benches (to be chosen from approved list)
      Tables, benches and other landscape element for residents and workers shall be located in Common Areas. Refer to Sheet A1 for potential locations.
   f. Trash Receptacles
      Waste and recycling shall be held within the Utility Sheds. In addition, trash receptacles will be strategically located in common spaces. Refer to Sheet A1 for potential locations.
   g. Composting Bins
      Landscape composting may be undertaken as by the Master Ownership Association. Refer to Sheet A1 for potential location.

3. Water Conservation .
   a. The Project shall include dedicated landscape irrigation meters and a smart controller for irrigation that utilizes either an on-site weather station or moisture-sensing device with drip irrigation, and bubbler heads for tree plantings.
   b. With the exception of the Project's Urban Agriculture components, the following water conservation principles shall be employed:
      1) High water use plants, decorative pools, fountains, and water features shall be limited to not more than 10 percent of the total landscaped area.
      2) All plantings areas shall be composed of low to moderate water use plants, as identified in Water Use Classification of Landscape Species (WUCOLS Guide) or other species, including native plants, that are well adapted to the climate of the region and require minimal water once established.
      3) Plants having similar water requirements shall be grouped together in distinct hydro-zones

4. Riparian Corridor
   Although 20-feet setbacks are prescribed for reaches of the arroyo to both the north and south of the site, this project will maintain a minimum development setback of 70 feet from the center of the channel.

Building Design

Buildings will be a mix of one to four story structures of tilt-up concrete and steel, masonry and / or wood frame structures. Flexibility is built-in. All buildings are capable of being sub-divided and structurally adapted to the changing needs of industrially zoned uses. Natural lighting and ventilation are facilitated through careful consideration of solar orientation and prevailing winds.

The architecture will be no-nonsense, economical and straightforward, with materials being used in their most natural state, free of extraneous ornamentation. Wall planes will be broken by passive solar shading devices and trellises. Large wall openings lining Service Roads will incorporate fenestration or roll-up doors as needed and be protected by building canopies typical of early industrial architecture. Bicycle sheds, utility meters, mechanical equipment, trash and recycling enclosures, will all serve as architecturally considered features of this work-a-day site.

Combined with the close proximity of buildings to the street and to each other, the functional variety of buildings, honestly expressed, will add color and vitality to the district.

Great variety will be encouraged within basic development guidelines that address issues of orientation, landscape treatment, building height and massing, large wall openings lining service alleys that incorporate fenestration or roll-up doors as needed.

1. Guiding Principles:
    a. Building designs shall be flexible:
        - Buildings shall be designed to be structurally adaptable to the changing needs of industrially zoned uses.
        - Buildings shall be capable of being subdivided.

    b. Building designs shall be economical and straightforward:
        - Wall treatment shall, in all cases, avoid applied decorations such as tyrofoam ornamentation (EIFS) or other gratuitous devices meant to impart historic themes or the illusion of complexity.
        - To the degree possible, materials shall be used in their most honest and straightforward forms, such as unpainted concrete block, or galvanized metal siding.
        - However, graffiti proof paint is encouraged on all long exterior walls, up to a height of 8 feet.

Building Design

2. Building Materials
   Buildings may be constructed of tilt up concrete, poured in place concrete, rammed earth, brick or concrete masonry, steel or wood frame construction, or combinations of appropriate construction types.
   a. Roofing (light reflective "cool" roof)
      1) Metal
      2) Single ply
      3) Composition
   b. Siding
      1) Concrete
         a) Natural
         b) Stained
         c) Painted
      2) Metal
         a) Corten weathering
         b) Factory painted
         c) Galvanized
      3) Stucco
   c. Stairs & Arbors
      1) Mix of pressure treated, tube steel and cable
      2) Precast concrete or steel treads
      3) Perforated or welded steel railing panels
   d. Window System
      1) Commercial storefront at ground floor
      2) Double glazed commercial windows above

3. Color
   Color as accent – windows, doors, sunscreens - shall be encouraged. Graffiti proof paints used as a wainscoating up to 8 feet high on exterior walls is encouraged.

4.. Surface Articulation
   Walls shall be articulated not through surface decoration, but through variations in fenestration, first and second floor access and stairways, solar shading devices, weather protection canopies, and armatures to support vines.

5. Building Levels or Stories
   - Industrial buildings shall be a mix of one, two and three stories, but shall maintain a façade of minimum two stories along the main north/south avenues.
   - Residential buildings with ground level industrial / commercial use may be four stories in height.

6. Projections
   - Entry canopies may extend to the inside face of sidewalk, or to the inside face of curb if clearance and construction meet appropriate city codes.
   - Low sloped roofs shall be encouraged to aid in the transition from multistory spaces along avenues to single story spaces at the rear of buildings, along service roads.
   - Projecting rooftop light monitors shall be encouraged when consolidated and architecturally articulated.

7. Equipment and Utility Sheds
   - Roof mounted mechanical equipment shall be consolidated and housed in architecturally articulated enclosures.
   - Utility meters, mechanical equipment, trash and re-cycling enclosures, and bicycle sheds shall be treated as architecturally integrated features of the buildings.
   - Refer to pages 5 & 6 for illustrative design variations for Utility Sheds. Designs are not limited to those shown.

8. Design permit findings require that industrial building design shall include measures for reusing heat generated by machinery, computers, and artificial lighting, as well as the requirement that all buildings and structures shall be designed and oriented to make use of natural lighting wherever possible.

9. Industrial Uses Within Work/Live Units
   Uses shall be limited to those non-hazardous activities allowed in residential occupancies (i.e., no open flame, no welding, cabinet shops, etc.). This will be enforced through the processing of occupancy permits as people move into their spaces. Fire separations between occupancies must be per the California Building Code (CBC), Table 3-B.

Green Building

The north/south site is arranged for the greatest efficiencies in traffic circulation, while maximizing opportunities for natural light and ventilation, solar access and social interactions. The site plan incorporates numerous green building features, giving a definite advantage to those seeking LEEDS certification on the site. With the city's cooperation, the site design alone could provide as many as ten points toward the twenty-six required for certification.

Owners are encouraged to take advantage of opportunities for green roofs and photovolatics as the infrastructure is planned for in the overall design. 2/12 pitch roofs are optimally oriented for the Lower Westside's microclimate where.foggy mornings mean minimal solar gain. The western orientation works almost as well for photovoltaics as a southern one, while green roofs on the east side can be protected from the prevailing west winds.

The riparian corridor along the western boundary will be further enhanced, and its management plan incorporated into the project CC&R's. The area bordering the creek will be landscaped for passive recreation.

Landscaping for individual buildings shall incorporate principals of sustainable design, including considerations for low or zero water consumption, the potential for edible landscaping and the value of substantial trees in lowering the heat sink effect of paved areas.

Green Building Concepts

1. Density
   The site is developed to an urban density, rather than conforming to low suburban density prescribed by underlying zoning codes.

2. Heat island roof
   All roofing shall be of light color or of reflective materials

3. Heat island non-roof
   a. Site plan shall incorporate and accommodate large, high branching trees.
   b. Pedestrian paving shall be light colored

4. Light pollution reduction
   Street and building lighting strategies that achieve this objective will be employed

5. Storage and collection of recyclables

6. Construction waste management-divert 50%

7. Manufactured locally- at least 20%: Concrete

8. Erosion and sedimentation control
   Per Erosion Control Plan submitted by Bowman and Williams

9. Site selection
   Job-generating project located on an infill site adjacent to residential and commercial neighborhoods. (jobs close to home.)

10. Public transportation access.
    a. Site shall accommodate bus stop and waiting facility adjacent to Delaware Avenue.
    b. Public access shall be reserved to north property line to allow potential for light rail stop along railroad right of way.

11. Bicycle storage and changing rooms
    Refer to Sheet A1 for location of bicycle parking locations and page 16 for additional information
    a. Utility street improvements include covered bicycle parking spaces that allow bikes to be individually secured.
    b. Class 2 bicycle devices will be incorporated into exterior stairs and entry canopies.
    c. Tenant spaces greater than 12,500 sq. ft. shall provide one employee shower facility accessible to the handicapped. Spaces greater than 30,000 sq. ft. shall provide two. Refer to page 16 for additional information.

12. Parking capacity
    On-site parking capacity shall meet on-site needs while avoiding excess paaving.

13. Protect or restore open space
    Recently restored Arroyo Seco waterway shall be enhanced, protected and maintained well beyond City standards for adjacent regions.

14. Stormwater management rate and quantity
    - All site runoff to be retained and released per Bowman and Williams plans.
    - All stormwater shall be treated before being released from the site, per Bowman and Williams plans.

15. Daylight 75% of space.

16. Innovation in design
    Flexible shells accommodate efficient changes to use over time.

17. LEED accredited professional: Ongoing member of original design team

Parking & Additional Considerations

Parking

The project's cooperative parking management requires that all spaces are available for use. There will be no reserved parking, with the exception of those spaces directly in front of roll up doors. By maximizing available parking, the area devoted to paving can be reduced so that more space can be assigned to the workplace.

1. Cooperative Parking
   a. Parking shall remain unreserved throughout the district, with the exception of spaces directly in front of roll up doors.
   b. Parking allotted per individual building will be based on occupancy, which prior to any reductions for mixed use, is:

Warehouse:	1 space per 1000 sf
Light Manufacturing:	1 space per 500 sf
Research + Development:	1 space per 325 sf
Office:	1 space per 300 sf
Retail:	1 space per 250 sf

2. Parking Layout Modifications
   Upon approval of the Master Owners Association, parking layouts shown may be modified for any proposed building that either:
   a. Does not conform to one of the prototypical designs
   b. Has a concentration of occupancies with high parking needs.

3. Loading Facilities
   Any business with loading needs shall follow these requirements per the Santa Cruz Municipal Code:
   a. Each loading space shall be not less than 10 feet in width, 30 feet in length, and with an overhead clearance of 14 feet.
   b. Loading spaces shall not occupy any required front or exterior yard or courtyard space.
   c. The loading area shall be paved with a durable dustless surface and shall be so graded and drained so as to disperse water.
   d. Wheestops and bumper rails sahll be provided where needed for safety or to protect property.
   e. If the loading area is illuminated, lighting shall be directed away from existing residential.
   f. Loading areas shall be maintained in good condition and kept free of trash, debris, and display of advertising uses.

4. Non-automobile use
   Non-Automobile use shall be encouraged through the support of public transportation systems, alternative methods of personal transportation and a system of clearly defined pedestrian pathways.

5. Bicycles
   a. Refer to Sheet A1 for location of Class I and Class II bicycle parking.
   b. Class I parking shall be provided inside each work/live unit and commerical condominium space.
   c. Utility Street improvements shall include ten bicycle sheds, dispersed throughout the site that will accommodate up to 100 Class I bicycle parking spaces.
   d. 14 Class 2 bicycle racks shall be distributed throughout the site in close proximity to plazas and residential flats.
   e. In addition, visitor bicycle parking shall be incorporated into exterior stairways, arbors and entries of individual businesses.

Additional Considerations

1. Bus stop(s)
   In the event that the transit authority elects to have buses serve the site, and this decision is made prior to the construction of the building on the parcel at the northwest corner of Delaware and Avenue Tea, this building will need to be designed to accommodate any required bus shelter such as, but not limited to, an awning, arbor or trellis.

2. Rail interface and Easement along tracks
   Site Plan accommodates pedestrian linkage to Rail Trail.

3. Showers
   a. Within the initial development construction, build-out of individual spaces will conform to local ordinances.
   b. At final build-out, a 4-stall shower facility shall be included in the vicinity of the Central Plaza.

4. Noise
   a. The city's noise ordinance standards will govern all development and particular consideration should be given to the mixed-use nature of the site.
   b. Any business within the industrial zone identified as a possible conflict with an adjacent use, will be required to mitigate excessive noise.
   c. Any, industrial business that chooses to use flex space for residential purposes will do so with the acknowledgement that these units may be subject to noise and other disturbances associated with an industrial zone.

Sign Program

see Sheet D1 for signage types and locations

1. General Requirements
   a. These guidelines have been established for the purpose of assuring a coordinated business identification sign program for the mutual benefit of all occupants. Conformance will be strictly enforced. Any installed non-conforming or un-approved sign must be brought into conformance at the non-conforming occupant's expense.

   b. Sign Proposals / Applications need to be submitted to the **Master Ownership Association** for review and approval. Applications are required to show how the signage will look on the building face, canopy or trellis, as well as its method of attachment. After written approval is obtained from the Association, Tenant must then submit and receive necessary approvals from the City of Santa Cruz.

2. Design Requirements
   This program addresses the exterior building signs for the Delaware project's prototypical building designs.

   a. All exterior signage shall conform to the approved Sign Program for this project as illustrated in signage drawings on Sheet D1, which identifies specific areas where signage may occur.

   b. Signage may be painted directly to building surface or individually mounted letters may be utilized. There is no restriction to signage font, material or color.

   c. Internally lit letters and neon signage will be allowed for retail businesses by the Master Ownership Association on a case-by-case basis.

   d. No building signs may list products or services sold unless that product or service is part of the actual name of the business.

   e. In cases where an area is delineated for "white enamel paint or case" it will be the responsibility of each business owner to procure the case or prepare the location for use.

3. Sign Types
   Sign Types and their approved locations are specific to prototypical building types and their locations, as shown on Sheet D1.

   a. Sign Type 1: Avenues
      1) Building number centered and stenciled on door
      2) Business information adjacent to doorway within case or area delineated by white enamel paint
      3) Business name centered above doorway on signage band

   b. Type 2: Avenues
      1) Building number centered and stenciled on door: Floors 1 and 2
      2) Business information adjacent to doorway within case or area delineated by white enamel paint: Floors 1 and 2
      3) Business name centered above doorway on lower face of stair landing rail for Floor 1 and on upper face for Floor 2

   c. Type 3: Service Roads
      a) Building number stenciled directly to wall adjacent to doorway
      2) Business information on opposite side, adjacent to doorway within case or area delineated by white enamel paint

   d. Type 4: Work/Live Townhouses on Pedestrian Lanes
      1) Building number centered and stenciled on door
      2) Business information adjacent to doorway within case or area delineated by white enamel paint

   e. Type 5: Commercial Units at Avenue Sea
      1) Building number and Business information stenciled to low garden wall in front of unit
      2) Business name centered on window and mounted from arbor above

   f. Type 6: Commercial Work/Live Units at Hard Road
      1) Building number stenciled directly to wall adjacent to doorway
      2) Business name centered on window on signage band
      3) Business name centered on window and mounted from balcony above

   g. Type 7: Commercial Work/Live Units at Hard Road
      Business name on painted band on raked walls running perpendicular to road

   h. Type 8: Central Plaza
      1) Building number stenciled directly to wall adjacent to doorway
      2) Business name centered above door on signage band.

   i. Type 9: Transit Plaza
      3) Building number on upper left corner of signage band over doorway
      4) Business name centered above door on signage band.

Sign Program

see Sheet D1 for signage types and locations

i. Type 10: Transit Plaza
   1) Building number centered and stenciled on door
   2) Business information adjacent to doorway within case or area delineated by white enamel paint
   3) Building name centered on doorway, located directly on face of arbor above.

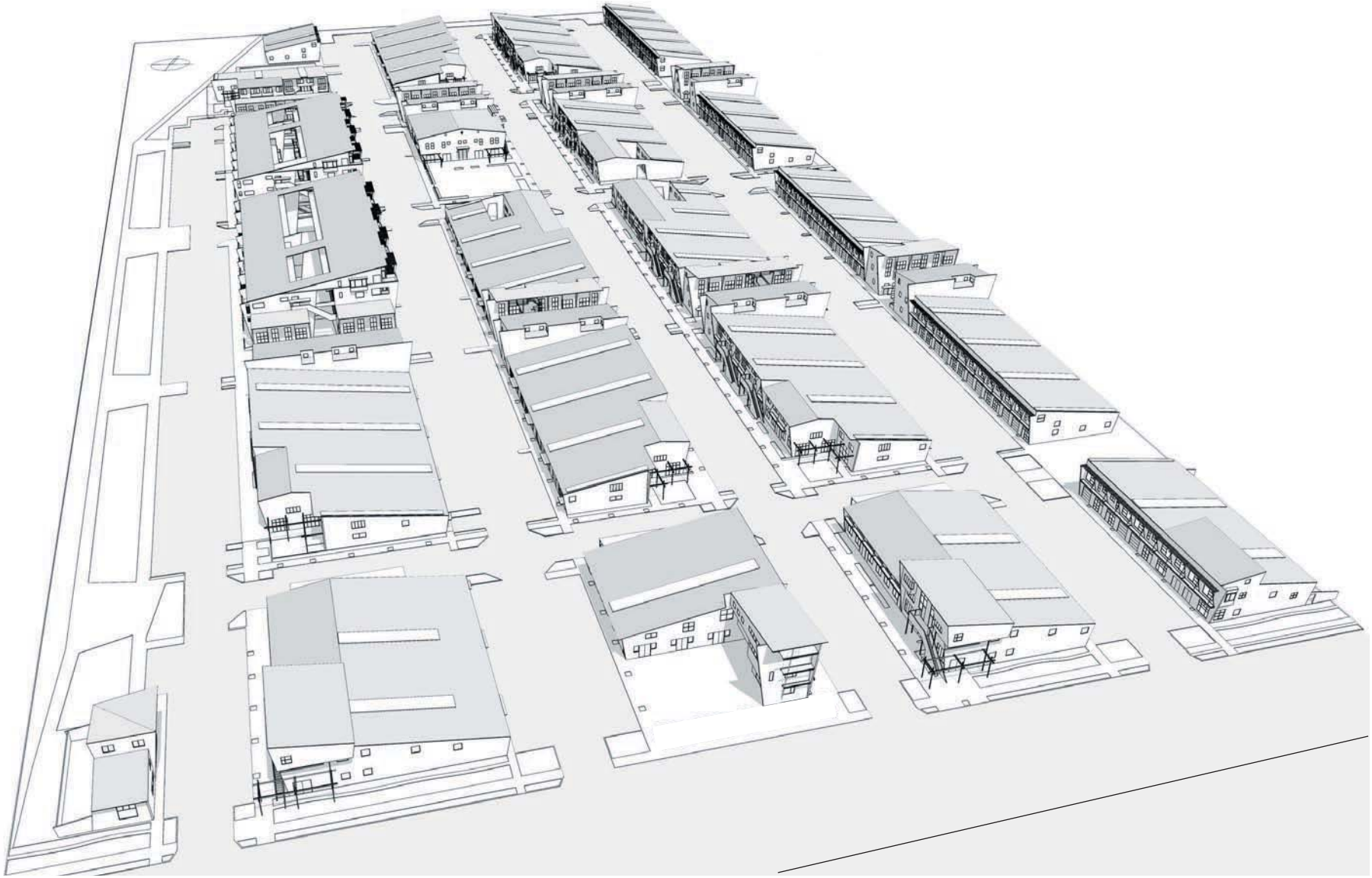
j. Type 11: Typical intersection of Avenue and Utility Street
   Building name centered on signage band above storefront.

4. General Performance Specifications, Execution and Installation Requirements:
   a. Employ a professional signage and graphics fabricator to prepare shop drawings and samples, manufacture, fabricate, assemble and install work of this section, who can:
      1) Demonstrate an experienced and complete record of successful installations
      2) Assume responsibility for the quality of materials and workmanship required for the execution of the work.
      3) Guarantee all materials and workmanship for a period of one (1) year after the final acceptance of the work and if during this period any defects of faulty materials are found, immediately upon notification from the Master Ownership Association representative(s), proceed at own expense, to remedy the condition together with any damage to the surrounding finishes or furnishings occurring as a result of the defect.

   b. No sign makers' label, or other identification will be permitted on the exposed surface of signs. UL Labels will be placed on top of letters.

   c. If any sign is ever to be removed for replacement or change in ownership, business owner shall leave the building surface, signage band or fascia panel of arbors in good condition, normal wear and tear excepted. Without limitation, each business owner shall specifically be required to fill (in a workmanlike manner) any holes left in the fascia when patching would not be satisfactory. Replacement of the blade sign may be required at the sole discretion of the Landlord.

   d. For approved illuminated retail signage, the following conditions apply:
      1) No exposed conduit, tubing or raceway will be permitted without approval by the Landlord.
      2) No exposed neon lighting shall be used on signs, symbols or decorative elements unless specifically approved by the Master Ownership Association.
      3) No internally illuminated cabinet signs will be permitted. No signs will be permitted on the building roofs.
      4) All conductors, transformers and other equipment shall be concealed.



DELAWARE *addition*

santa cruz, california

Redtree Properties, L.P.
1362 Pacific Avenue
Santa Cruz, CA 95060
831.427.1900

Appendix H
TRAFFIC IMPACT ANALYSIS
Revised Exhibits

	N-S Street	E-W Street	Existing Operational Lane Configuration	Existing Intersection Control	LOS Standard	Existing Conditions				Existing Plus Project Conditions (1-3 Years)				Existing Plus Project Buildout				Cumulative				Cumulative Plus Project Buildout			
						AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
						Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Swanton Blvd.	Delaware Avenue	NB 1-L, 1-R EB 1-T/R WB 1-L/T	Stop Sign (Overall) (Worst Approach)	**D** **(E)**	**2.2** 9.9	**A** **A**	**2.5** 9.9	**A** A	**2.1** 9.9	**A** A	**2.4** 10.0	**A** B	**2.0** 10.2	**A** B	**2.2** 10.2	**A** B	**1.3** 12.4	**A** B	**1.5** 12.8	**A** B	**1.3** 13	**A** B	**1.5** 13.4	**A** B
2	Swift Street	Delaware Avenue	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-Way Stop *Signal* *Roundabout*	**D**	**13.0**	**B**	**11.0**	**B**	**17.0**	**C**	**13.4**	**B**	***61.6***	***F***	***34.0***	***D***	***81.3***	***F***	***42.8***	***E***	***244.6***	***F***	***186.5***	***F***
														16.7 *7*	*B* *A*	*15.8* *6*	*B* *A*	*24.7* *6.9*	*C* *A*	*23.6* *6.1*	*C* *A*	*23* *17.8*	*C* *C*	*18.6* *12.2*	*B* *B*
3	Fair Avenue	Delaware Avenue	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-Way Stop	**D**	**10.1**	**B**	**9.0**	**A**	**10.7**	**B**	**9.3**	**A**	**13.5**	**B**	**10.8**	**B**	**17.4**	**C**	**11.4**	**B**	**32.9**	**D**	**16.5**	**C**
4	Almar Avenue	Delaware Avenue	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-Way Stop	**D**	**11.4**	**B**	**11.4**	**B**	**11.8**	**B**	**11.7**	**B**	**13.8**	**B**	**13.1**	**B**	**16.4**	**C**	**16.4**	**C**	**26.2**	**D**	**23.3**	**C**
5	Laguna Street	Bay Street	NB 1-L, 1-R EB 1-T/R WB 1-L/T	Stop Sign (Overall) (Worst Approach)	**D** **(E)**	**3.1** 10.5	**A** B	**3.9** 11.8	**A** B	**3.1** 10.5	**A** B	**3.9** 11.8	**A** B	**3.1** 10.5	**A** B	**3.9** 11.8	**A** B	**3.2** 11.2	**A** B	**3.9** 12.9	**A** B	**3.2** 11.2	**A** B	**3.9** 12.9	**A** B
6	Western Drive	Hwy 1-Mission Street	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T/R WB 1-L, 1-T/R	Signal	**D**	**16.4**	**B**	**14.1**	**B**	**16.5**	**B**	**14.3**	**B**	**16.7**	**B**	**14.6**	**B**	**22.4**	**C**	**20.4**	**C**	**23.3**	**C**	**20.5**	**C**
7	Swift Street	Hwy 1-Mission Street	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	**D**	**17.2**	**B**	**15.5**	**B**	**18.1**	**B**	**16.6**	**B**	**23.1**	**C**	**20.6**	**C**	**19.3**	**B**	**19.2**	**B**	**36.9**	**D**	**36.2**	**D**
8	King Street	Hwy 1-Mission Street	NB 1-L/T/R SB 1-L, 1-L/T/R EB 1-L/T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	**D**	**28.6**	**C**	**36.2**	**D**	**29.2**	**C**	**37.5**	**D**	**32.8**	**C**	**45.9**	**D**	**41.0** *23.9*	**D** *C*	**94.4** *50.3*	***F*** *D*	***62.5*** *27.2*	***E*** *C*	***116*** *68.8*	***F*** *E*
9	Almar Avenue	Hwy 1-Mission Street	NB 1-L, 1-R SB 1-L, 1-R EB 1-T, 1-T/R WB 1-L, 2-T	Signal	**D**	**12.7**	**B**	**16.5**	**B**	**18.9**	**B**	**22.1**	**C**	**21.9**	**C**	**25**	**C**	**14.3**	**B**	**22.8**	**C**	**50.9**	**D**	**52.8**	**D**
10	Hwy 1-Mission Street	Bay Street	NB 1-L, 1-T/R SB 1-L, 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	**D**	**40.7**	**D**	**41.2**	**D**	**40.7**	**D**	**41.5**	**D**	**42.0**	**D**	**42.6**	**D**	***62.4*** *37.8*	***E*** *D*	***71.6*** *41.2*	***E*** *D*	***79.1*** *39.4*	***E*** *D*	***81.3*** *43.5*	***F*** *D*
11	Hwy 1-Mission Street	Laurel Street	NB 1-L, 1-T, 1-T/R SB 1-L, 1-T, 1-T/R EB 1-L, 1-T/R WB 1-L, 1-T/R	Signal	**D**	**23.0**	**C**	**23.9**	**C**	**23.0**	**C**	**23.8**	**C**	**23.4**	**C**	**24.1**	**C**	**26.1**	**C**	**28.9**	**C**	**28.6**	**C**	**34.9**	**C**
12	Hwy 1-Mission Street	Chestnut Street	NB 1-L, 1-T, 1-T/R SB 1-L, 2-T, 2-R EB 1-L, 1-L/T, 1-T/R WB 1-L/T, 1-T/R	Signal	**E**	**36.8**	**D**	**43.8**	**D**	**37.5**	**D**	**44.2**	**D**	**40.6**	**D**	**46.3**	**D**	**50.0**	**D**	**65.7**	**E**	***69.9*** *44.9*	***E*** **D**	***78.4*** *71.7*	***E*** **E**
13	Highway 1	Highway 9	NB 1-L, 1-T, 2-R SB 2-L, 1-T, 1-R EB 1-L, 2-T, 1-T/R WB 2-L, 3-T, 1-R	Signal	**E**	**47.9** *22.5*	**D** *C*	**74.1** *33.9*	**E** *C*	**47.2** *22.6*	**D** *C*	**74.4** *34.0*	**E** *C*	**47.3** *22.7*	**D** *C*	**77.2** *33.9*	**E** *C*	***58.1*** *27.6*	***E*** *C*	***106.2*** *46.0*	***F*** *D*	***58.7*** *27.5*	***E*** *C*	***118*** *49.5*	***F*** *D*

NOTES:
1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
3. Analysis performed using 2000 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Santa Cruz is LOS D, unless otherwise noted. Overall level of service standard for Caltrans is the LOS C/D threshold.
5. Levels of service cited under *Mitigations* use recommended improvements shown on Exhibit 5B.
6. * = Delay is over 300 seconds (5 minutes).
7. Mitigated Levels of Service Highlighted represent an unmitigatable significant impact.

	N-S Street	E-W Street	Existing Operational Lane Configuration	Existing Intersection Control	LOS Standard	Existing Conditions				Existing Plus Project Conditions (1-3 Years)				Existing Plus Project Buildout				Cumulative				Cumulative Plus Project Buildout			
						AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
						Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Swanton Blvd.	Delaware Avenue	NB 1-L, 1-R EB 1-T/R WB 1-L/T	Stop Sign (Overall) (Worst Approach)	D (E)	2.2 9.9	A A	2.5 9.9	A A	2.1 9.9	A A	2.4 10.0	A B	2.0 10.2	A B	2.2 10.2	A B	1.3 12.4	A B	1.5 12.8	A B	1.3 13	A B	1.5 13.4	A B
2	Swift Street	Delaware Avenue	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-Way Stop *Signal* *Roundabout*	D	13.0	B	11.0	B	17.0	C	13.4	B	*100.4* *29.1* *8.2*	*F* *C* *A*	*76.1* *27.2* *7.4*	*F* *C* *A*	*81.3* *24.7* *6.9*	*F* *C* *A*	*42.8* *23.6* *6.1*	*E* *C* *A*	*301.2* *38.1* *26.8*	*F* *D* *D*	*269.5* *31.4* *19.8*	*F* *C* *C*
3	Fair Avenue	Delaware Avenue	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-Way Stop	D	10.1	B	9.0	A	10.7	B	9.3	A	13.5	B	10.8	B	17.4	C	11.4	B	32.9	D	16.5	C
4	Almar Avenue	Delaware Avenue	NB 1-L/T/R SB 1-L/T/R EB 1-L/T/R WB 1-L/T/R	All-Way Stop	D	11.4	B	11.4	B	11.8	B	11.7	B	13.8	B	13.1	B	16.4	C	16.4	C	26.2	D	23.3	C
5	Laguna Street	Bay Street	NB 1-L, 1-R EB 1-T/R WB 1-L/T	Stop Sign (Overall) (Worst Approach)	D (E)	3.1 10.5	A B	3.9 11.8	A B	3.1 10.5	A B	3.9 11.8	A B	3.1 10.5	A B	3.9 11.8	A B	3.2 11.2	A B	3.9 12.9	A B	3.2 11.2	A B	3.9 12.9	A B
6	Western Drive	Hwy 1-Mission Street	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T/R WB 1-L, 1-T/R	Signal	D	16.4	B	14.1	B	16.5	B	14.3	B	16.7	B	14.6	B	22.4	C	20.4	C	23.3	C	20.5	C
7	Swift Street	Hwy 1-Mission Street	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	17.2	B	15.5	B	18.1	B	16.6	B	23.1	C	20.6	C	19.3	B	19.2	B	36.9	D	36.2	D
8	King Street	Hwy 1-Mission Street	NB 1-L/T/R SB 1-L, 1-L/T/R EB 1-L/T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	28.6	C	36.2	D	29.2	C	37.5	D	32.8	C	45.9	D	41.0 *23.9*	D *C*	94.4 *50.3*	*F* *D*	*66.8* *39.5*	*E* *D*	*120.1* *72.8*	*F* *E*
9	Almar Avenue	Hwy 1-Mission Street	NB 1-L, 1-R SB 1-L, 1-R EB 1-T, 1-T/R WB 1-L, 2-T	Signal	D	12.7	B	16.5	B	18.9	B	22.1	C	21.9	C	25	C	14.3	B	22.8	C	50.9	D	52.8	D
10	Hwy 1-Mission Street	Bay Street	NB 1-L, 1-T/R SB 1-L, 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	40.7	D	41.2	D	40.7	D	41.5	D	42.0	D	42.6	D	*62.4* *37.8*	*E* *D*	*71.6* *41.2*	*E* *D*	*81.5* *40.0*	*F* *D*	*82* *44.7*	*F* *D*
11	Hwy 1-Mission Street	Laurel Street	NB 1-L, 1-T, 1-T/R SB 1-L, 1-T, 1-T/R EB 1-L, 1-T/R WB 1-L, 1-T/R	Signal	D	23.0	C	23.9	C	23.0	C	23.8	C	23.4	C	24.1	C	26.1	C	28.9	C	28.6	C	34.9	C
12	Hwy 1-Mission Street	Chestnut Street	NB 1-L, 1-T, 1-T/R SB 1-L, 2-T, 2-R EB 1-L, 1-L/T, 1-T/R WB 1-L/T, 1-T/R	Signal	E	36.8	D	43.8	D	37.5	D	44.2	D	40.6	D	46.3	D	50.0	D	65.7	E	*74.9* *46.1*	*E* *D*	*80.5* *74.1*	*F* *E*
13	Highway 1	Highway 9	NB 1-L, 1-T, 2-R SB 2-L, 1-T, 1-R EB 1-L, 2-T, 1-T/R WB 2-L, 3-T, 1-R	Signal	E	47.9 *22.5*	D *C*	74.1 *33.9*	E *C*	47.2 *22.6*	D *C*	74.4 *34.0*	E *C*	47.1 *22.7*	D *C*	75.4 *34.6*	E *C*	*58.1* *27.6*	*E* *C*	*106.2* *46.0*	*F* *D*	*58.6* *27.7*	*E* *C*	*113* *53.1*	*F* *D*

NOTES:
1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound
3. Analysis performed using 2000 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Santa Cruz is LOS D, unless otherwise noted. Overall level of service standard for Caltrans is the LOS C/D threshold.
5. Levels of service cited under *Mitigations* use recommended improvements shown on Exhibit 5B.
6. * = Delay is over 300 seconds (5 minutes).
7. Mitigated Levels of Service Highlighted represent an unmitigatable significant impact.
8. Worst Case LOS - this scenario assumed the maximum range of development for research and development, office, and retail uses, which generate more average daily and peak hour trips, as compared to warehouse and light manufacturing.

Delaware Project Buildout
Maximize Industrial Worst Case Trip Generation
2200 Delaware Avenue
Santa Cruz, California
February 26, 2007

	ITE LAND USE CODE	% OF TOTAL	PROJECT SIZE	WEEKDAY DAILY TRIPS	AM PEAK HOUR TOTAL PEAK HOUR	AM % OF ADT	AM IN	/	AM OUT	PM PEAK HOUR TOTAL PEAK HOUR	PM % OF ADT	PM IN	/	PM OUT
TRIP GENERATION RATES[1]														
Warehouse (per 1,000 sf)	150			4.96	0.45	9%	0.82	/	0.18	0.47	9%	0.25	/	0.75
Light Manufacturing (per 1,000 sf)	140			3.82	0.73	19%	0.77	/	0.23	0.74	19%	0.36	/	0.64
Research & Development (per 1,000 sf)	760			8.11	1.24	15%	0.83	/	0.17	1.08	13%	0.15	/	0.85
Office (per 1,000 sf)	715			11.57	1.8	16%	0.89	/	0.11	1.73	15%	0.15	/	0.85
Retail (per 1,000 sf) [2]	814			44.32	1.33	3%	0.50	/	0.50	2.71	6%	0.44	/	0.56
Condominiums/Townhomes (per unit)	220			6.72	0.51	8%	0.2	/	0.8	0.62	9%	0.65	/	0.35
PROJECT TRIPS			395,382											
Warehouse (per 1,000 sf)	150	5%	19,769 sq. ft.	98	9	9%	7	/	2	9	9%	2	/	7
Light Manufacturing (per 1,000 sf)	140	5%	19,769 sq. ft.	76	14	18%	11	/	3	15	20%	5	/	10
Research & Development (per 1,000 sf)	760	35%	138,384 sq. ft.	1,122	172	15%	143	/	29	149	13%	22	/	127
Office (per 1,000 sf)	715	45%	177,922 sq. ft.	2,059	320	16%	285	/	35	308	15%	46	/	262
Retail (per 1,000 sf)	814	10%	39,538 sq. ft.	1,752	53	3%	27	/	26	107	6%	47	/	60
Work/Live (per unit)	220		77 unit	517	39	8%	8	/	31	48	9%	31	/	17
Work/Live Reduction (30 % trip reduction)				155	12		2		9	14		9		5
Final Work/Live Trips (1-2)				362	**27**		**6**	**/**	**22**	**34**		**22**	**/**	**12**
Flats (per unit)	220		84 unit	564	43	8%	9	/	34	52	9%	34	/	18
Subtotal				6,034	638	11%	488	/	151	674	11%	178	/	496
Internal Trip Reduction (15%)				-905	-96	11%	-73	/	-23	-101	11%	-27	/	-74
Net Total				**5,129**	**542**	**11%**	**415**	**/**	**129**	**573**	**11%**	**151**	**/**	**421**

Note:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation*, 7th Edition, 2003.

EXHIBIT 8
WORST CASE
PROJECT TRIP GENERATION
PROJECT BUILDOUT

Delaware Project Buildout
Alternative 2
2200 Delaware Avenue
Santa Cruz, California
March 5, 2008

	ITE LAND USE CODE	% OF TOTAL	PROJECT SIZE	WEEKDAY DAILY TRIPS	AM PEAK HOUR TOTAL PEAK HOUR	AM % OF ADT	AM IN	/	AM OUT	PM PEAK HOUR TOTAL PEAK HOUR	PM % OF ADT	PM IN	/	PM OUT
TRIP GENERATION RATES[1]														
Warehouse (per 1,000 sf)	150			4.96	0.45	9%	0.82	/	0.18	0.47	9%	0.25	/	0.75
Light Manufacturing (per 1,000 sf)	140			3.82	0.73	19%	0.77	/	0.23	0.74	19%	0.36	/	0.64
Research & Development (per 1,000 sf)	760			8.11	1.24	15%	0.83	/	0.17	1.08	13%	0.15	/	0.85
Office (per 1,000 sf)	715			11.57	1.8	16%	0.89	/	0.11	1.73	15%	0.15	/	0.85
Retail (per 1,000 sf) [2]	814			44.32	1.33	3%	0.50	/	0.50	2.71	6%	0.44	/	0.56
Condominiums/Townhomes (per unit)	220			6.72	0.51	8%	0.2	/	0.8	0.62	9%	0.65	/	0.35
PROJECT TRIPS			370,000											
Warehouse (per 1,000 sf)	150	10%	35,000 sq. ft.	174	16	9%	13	/	3	16	9%	4	/	12
Light Manufacturing (per 1,000 sf)	140	10%	35,000 sq. ft.	134	26	19%	20	/	6	26	19%	9	/	17
Research & Development (per 1,000 sf)	760	35%	130,000 sq. ft.	1,054	161	15%	134	/	27	140	13%	21	/	119
Office (per 1,000 sf)	715	45%	170,000 sq. ft.	1,967	306	16%	272	/	34	294	15%	44	/	250
Retail (per 1,000 sf)	814		- sq. ft.	0	0	0%	0	/	0	0	0%	0	/	0
1 Work/Live (per unit)	220		- unit	0	0	0%	0	/	0	0	0%	0	/	0
2 Work/Live Reduction (30 % trip reduction)				0	0		0		0	0		0		0
Final Work/Live Trips (1-2)				0	**0**		**0**	**/**	**0**	**0**		**0**	**/**	**0**
Flats (per unit)	220		- unit	0	0	0%	0	/	0	0	0%	0	/	0
Subtotal				3,329	509	15%	439	/	70	476	14%	78	/	398
Internal Trip Reduction (15%)				-499	-76	15%	-66	/	-11	-71	14%	-12	/	-60
Net Total				**2,830**	**433**	**15%**	**373**	**/**	**60**	**405**	**14%**	**66**	**/**	**338**

Note:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation*, 7th Edition, 2003.

CUMULATIVE TRAFFIC GENERATION

		WEEKDAY TRIP GEN. (ADT)	WEEKDAY AM PEAK HOUR PEAK HOUR VOL.	IN	/	OUT	WEEKDAY PM PEAK HOUR PEAK HOUR VOL.	IN	/	OUT
TOTAL SHORT- PLUS LONG-TERM DEVELOPMENT:	2006	29,413	2,679	1,768	/	911	3,110	1,204	/	1,906
TOTAL SHORT- PLUS LONG-TERM DEVELOPMENT:	2007	27,048	2,047	1,328	/	719	2,728	1,114	/	1,538
	Difference	**2,365**	**632**	**440**	/	**192**	**382**	**90**	/	**368**
UCSC Projects:	2006	13,708	1,062	771	/	292	1,312	479	/	832
UCSC Projects:	2007	13,216	988	709	/	279	1,246	470	/	776
	Difference	**492**	**74**	**62**	/	**13**	**66**	**9**	/	**56**

EXHIBIT 13C

CUMULATIVE TRAFFIC COMPARISON

Appendix I
SOILS SAMPLING PLAN FOR PERSISTENT PESTICIDES

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 Fax (831) 722-1159
www.weber-hayes.com

May 30, 2008

RBF Consulting
3180 Imjin Road, Suite 110
Marina, CA 93933

Subject: **Soil Sampling Plan for Persistent Pesticides**

Site Location: **2120 Delaware Avenue, Santa Cruz, CA**

Dear Sirs:

This workplan describes proposed work tasks designed to determine whether former agricultural activities at the site prior to 1970 have impacted the surface soils with the pesticide chemicals of concern. This sampling plan has been designed to determine if specific areas at the site contain elevated levels of persistent pesticide compounds, both laterally and vertically. Specifically, surface and shallow soil samples will be collected and tested for persistent organochlorine pesticide compounds, including DDT and its breakdown metabolites. The workplan provides:

- an overview of known site conditions including a brief description of the subject parcel layout, and an overview of shallow hydrogeology, and fate and transport information on DDT.
- established health-based screening levels (Preliminary Remediation Goals, PRGs) proposed as target cleanup levels.
- a proposed sampling and testing plan designed to determine potential presence of hot spots as well as vertical extent of any elevated detections. Soil sampling will follow guidance from the California DTSC 1. Samples will be collected from multiple depths (3-6 inches, 9-12 inches, 15-18 inches and 21-24 inches). A total of eight composite samples will be collected at each depth (each composite composed of four discrete soil samples). The shallowest sample will be analyzed for all eight locations, and if pesticides are present above established, risk-base threshold limits, the deeper sample from that quadrant will be tested.

If the sampling determines that residual pesticide contamination is present in soil above proposed Preliminary Remediation Goals (listed below), we will provide:

- a grading and relocation plan that describes specific volumes to be removed,
- confirmation sampling during grading to confirm removal to target levels,
- stockpile management and sampling to determine average concentrations, and
- details on the placement of stockpiled soils as subgrade backfill in an area of asphalt-covered road/parking, or offsite disposal, depending on soil volume and concentrations.

[1] Interim Guidance for Sampling Agricultural Fields, California Department of Toxic Substances Control, August 26, 2002.

If the sampling confirms that no significant contamination is present (i.e., if concentrations in all tested composite samples are below PRGs), no further action is proposed.

Background Information on Residual DDT: As described above, development plans for the subject site include proposed conversion from a vacant lot with former agricultural use, to commercial/residential use. The following section provides background on the general use and breakdown of DDT.

Origin and Use: DDT and its primary breakdown metabolites DDE and DDD are manufactured chemicals and are not known to occur naturally in the environment. DDT is an organochlorine insecticide that was first developed in World War II and was successfully used to combat malaria, typhus, and other insect-borne human diseases among military and civilian populations. The World Health Organization indicates that up to twenty-five million lives were saved by the use of DDT to control pests.

DDT came into wide agricultural and commercial usage in the late 1940s and was termed the "miracle" pesticide because of its low toxicity to warm-blooded animals, broad spectrum efficiency, long residual effects, and very low toxicity to plants. Studies have shown that plants growing in soils that contain typical levels of DDT in general do not uptake or store DDT and its metabolites in their tissues. Unfortunately, DDT was so extensively applied that some of the target insects developed resistance. Concerns about its persistence in the environment and possible health effects from bioaccumulation led to restrictions and a ban in 1972.

Physical Properties of DDT: When applied to soil DDT undergoes slow biodegradation (digestion by bacteria) through reductive dechlorination to form DDE and DDD (DDE is generally slower to break down and therefore more persistent than DDT). Studies have shown that DDT has a half-life in the soil of between 2 and 15 years.

DDT and its metabolites are essentially immobile in soil, becoming strongly absorbed onto the surface layer of soils. DDT and its metabolites are usually concentrated in the top few inches because of their low solubility and tendency to strongly attach to soil particles, including organic matter. As a result they are rarely found in groundwater samples because the chemical is only slightly soluble in water and is more likely to stick to soil particles than to flow with groundwater in an aquifer. Because DDT and its metabolites do not degrade quickly in the environment, the amounts that may be left behind from applications that ceased decades ago may be significant.

Human Health Issues: No definitive association with exposure to DDT and its metabolites and illness with cancer have been made. Industrial workers heavily exposed to DDT during its manufacture and compounding have not had a higher incidence of cancer than workers not exposed to DDT. Hospital examinations of workers in DDT manufacturing plants showed no abnormalities that could be related to DDT even though their body fat contained up to 648 ppm DDT.

Preliminary Remediation Goals for Detected Pesticides: Preliminary Remediation Goals (PRGs) are risk-based concentrations, derived from standardized equations combining exposure information assumptions with toxicity data. They were established for the EPA cleanup programs and are used as initial screening levels by the California Department of Toxic Substances Control (DTSC) as they are considered to be protective for humans (including sensitive groups), over a lifetime.

The PRGs role in site screening is to help identify areas, contaminants, and conditions that do not require further environmental attention at a particular site. When considering PRGs as cleanup goals, it is EPA's preference to assume maximum beneficial use of a property (that is, residential use). Generally, at sites where contaminant concentrations fall below PRGs, no further action or study is warranted so long as the exposure assumptions at a site match those taken into account by the PRG calculations. Sites exceeding a PRG suggest that further evaluation of the potential risks that may be posed by site contaminants is appropriate.

The following are the established, health-based PRG's for residential site use for contaminants of concern at the subject site. If no soil sampling results exceed these PRGs, no further action will be proposed:

Contaminant	RESIDENTIAL PRG for Soil
DDT	1.6
DDE	1.6
DDD	2.3

PROPOSED SCOPE OF WORK:

This workplan describes proposed work tasks designed to determine whether former agricultural use at the subject site has impacted the surface soils with chemicals of concern. Specifically, surface and shallow soil samples will be collected and tested for persistent organochlorine pesticide compounds, including DDT and its primary breakdown metabolites. Investigation work tasks will be completed to satisfy Local and State guidelines for investigation and technical report preparation. Included as attachments to this report is a Site Health & Safety Plan, and a description of proposed field methodology (Appendix A). Soil sampling density (eight composite samples for 20 acres) will follow guidance from the California DTSC [2]. Soil sampling layout is presented in Figure 1.

Samples will be collected from multiple depths (3-6 inches, 9-12 inches, 15-18 inches and 21-24 inches). A total of eight composite samples will be collected at each depth (each composite composed of four discrete soil samples). The shallowest sample will be analyzed for all eight locations, and if pesticides are present above 1 mg/kg (part per million), the next deeper sample from that quadrant will be tested. This data will be used to develop a grading and disposal plan, if required.

Drilling and sampling work tasks will include:

- Preparation of a Site Health and Safety Plan in accordance with OSHA standards. Pre-drilling services will include obtaining any required permits, confirming the location of subsurface utilities with the property owner, and scheduling SC-HSA for field inspection.
- The exploratory borings will be advanced with a driven probe hydraulic rig. Surface samples will be collected from depths of 3-6 inches. Vegetation and root mat will not be sampled. Only these surface samples will be analyzed, unless Organochlorine Pesticides

[2] Interim Guidance for Sampling Agricultural Fields, California Department of Toxic Substances Control, August 26, 2002.

DDT, DDE, or DDD, or are detected at greater than 1 ppm at 3-6 inches. Additional deeper samples will be collected from each location, labeled, transported under chain of custody, and held at the lab. The deeper sample from a given quadrant will be analyzed to define the vertical extent of concentrations greater than 1 ppm, only if Organochlorine pesticides are detected at greater than 1 ppm.

The results of the collected samples will confirm or deny whether shallow soils have been significantly impacted by the targeted chemicals of concern. Soil samples will be continuously cored and augured and carefully logged by an experienced geologist for soil type and evidence of potential soil contamination (discoloration/odor). Detailed field methodology for driven probe logging, sample collection, and chain of custody documentation is included in Appendix A.

Following the receipt of the certified laboratory's analytical results, a brief written report will document field operations and summarize the site conditions and propose remedial excavation and relocation operations, if necessary. The report will provide tabulated results, figures presenting sampling locations with analytical results, and the certified laboratory report. Investigation and reporting work tasks will be conducted under the direct supervision of a geologist registered in the State of California and will be completed to satisfy Local and State guidelines for investigation and technical report preparation.

If the current confirmation sampling confirms that no significant contamination is present (i.e., if concentrations are below proposed target cleanup levels), we will request regulatory closure of this issue.

If the current confirmation sampling confirms that residual contamination is present above Preliminary Remediation Goals, Weber, Hayes and Associates will prepare:

- a grading and relocation plan that describes specific volumes to be removed,
- confirmation base sampling to confirm removal to target levels,
- stockpile management and sampling to determine average concentrations, and
- details on the placement of stockpiled soils as subgrade backfill in an area targeted for an asphalt-covered road or a parking area, or offsite disposal.

LIMITATIONS

Our service consists of professional opinions and recommendations made in accordance with generally accepted geologic principles and practices. This warranty is in lieu of all others, either expressed or implied. The analysis and conclusions in this report are based on sampling and testing which are necessarily limited. Additional data from future work may lead to modifications of the options expressed herein.

If you have any questions or comments regarding this project, please contact us at our office (722-3580).

Respectfully submitted,

WEBER, HAYES AND ASSOCIATES
A California Corporation

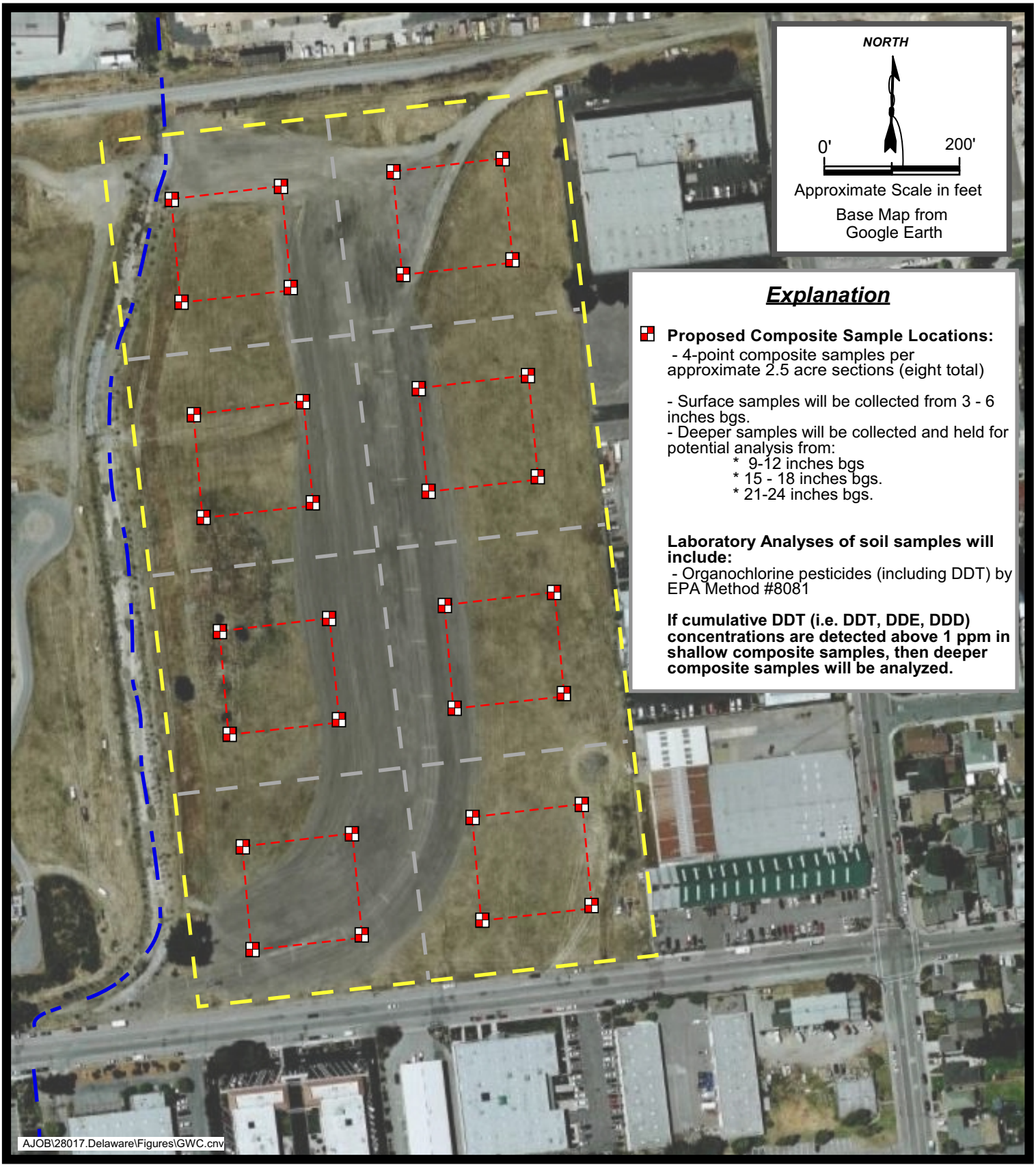
And: _____

Joseph Hayes, CHg #373
Principal Hydrogeologist

Attachments:

Figure 1: Site Map with Sample Locations

Appendix A: Proposed Field Methodology



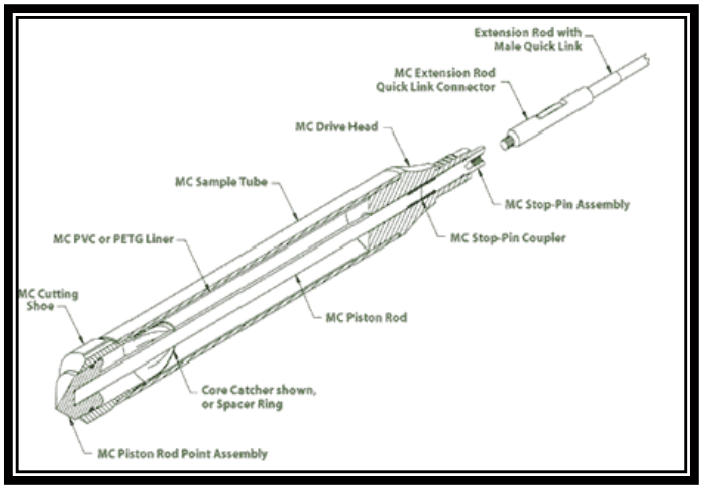
Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100

Pesticide Sampling Plan
2120 Delaware Avenue
Mixed Use Project
Santa Cruz, California

FIGURE
1
Job #
28017

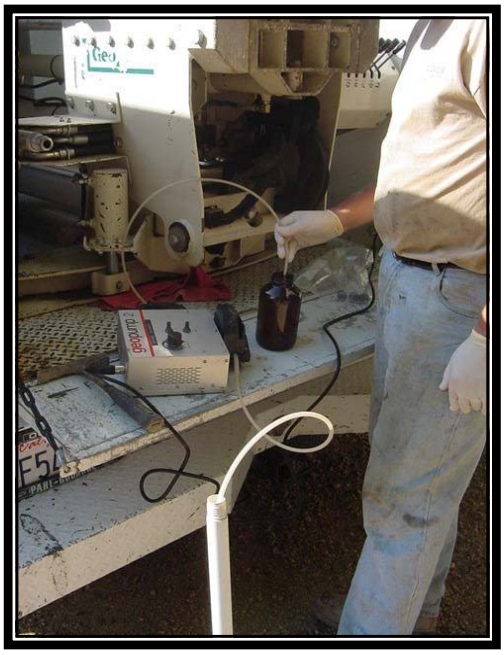
Field Methodology
Hydraulic Driven Probes
Using Macro-Core®, Large Bore® or Dual Tube® Hydraulic Driven Probes

Direct push exploratory borings are "drilled" Geo-Probe rig, which hydraulically drives and vibrates steel probes into the soil. No drill cuttings are produced. This sampling technology has the ability for either continuous or discrete sampling using a 4-foot long nickel-plated sampling probes fitted with clear acetate liners. During coring operations, the sampler remains open as it is driven into undisturbed soil over its entire 4-foot sampling interval. After drilling, all exploratory boreholes are grouted according to county regulations



The soil cores are logged by an experienced geologist using the Unified Soil Classification System (USCS), noting in particular, the lithology of the soils, moisture content, and any unusual odor or discoloration. Relatively undisturbed soil samples are obtained for both lithologic logging and laboratory analysis. A portion of individual soil cores are stored in a sealed plastic bags for field screening of hydrocarbons and/or volatile organic compounds by an Organic Vapor Analyzer (Photoionization Detector, PID). Vapor readings in parts per million (ppm) are recorded on the boring logs. The PID is also used during drilling for monitoring the work area for site safety.

All drilling equipment is steam cleaned prior to arriving on-site to prevent possible transfer of contamination from another site. The sampling probe and all other soil sampling equipment are thoroughly cleaned between each sampling event by washing in a Liqui-Nox or Alconox solution followed by a double rinsing with distilled water to prevent the transfer of contamination.



Samples Targeted for Laboratory Analysis: Soil samples targeted for laboratory analysis are immediately protected at both ends with Teflon tape, sealed with non-reactive caps, taped, labeled, and immediately stored in an insulated container cooled with blue ice. A portion of the soil is placed in a ZipLog Bag and the soil gas is measured using the PID. Groundwater samples are collected after temporary casing is placed in the hole and four to ten borehole volumes are purged. Relatively representative groundwater samples are collected with individual disposable acrylic bailers and dispensed directly into containers specifically prepared for the analyses. Once collected, groundwater samples are immediately placed in ice chests cooled with blue ice. Soil and groundwater samples are then transported to a State-certified laboratory under appropriate chain-of-custody documents.