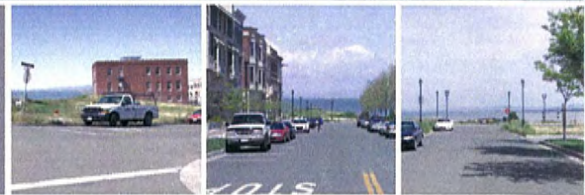




DRAFT ENVIRONMENTAL IMPACT REPORT  
FOR THE HERCULES BAYFRONT PROJECT

NOVEMBER 2010  
STATE CLEARINGHOUSE #2009112058



PREPARED BY  
THE CITY OF HERCULES



---

## CONTENTS

---

	<u>Page</u>
1. INTRODUCTION .....	1-1
1.1 EIR Purpose and Intended Use .....	1-1
1.2 Notice of Preparation .....	1-2
1.3 EIR Scope .....	1-2
1.4 Impact Assessment Baseline .....	1-3
1.5 Key EIR Terminology .....	1-3
1.6 Report Organization and Content .....	1-6
2. SUMMARY .....	2-1
2.1 Proposed Project .....	2-1
2.2 Required Approvals .....	2-3
2.3 Environmental Issues .....	2-4
2.4 Summary of Significant Impacts and Mitigation Measures .....	2-4
2.5 Summary of Alternatives .....	2-69
2.6 Mitigation Implementation .....	2-71
3. PROJECT DESCRIPTION .....	3-1
3.1 Project Description Overview .....	3-1
3.2 Project Setting .....	3-3
3.3 Project Background .....	3-4
3.4 Project Objectives .....	3-15
3.5 Project Physical Characteristics .....	3-16
3.6 Shared Facilities .....	3-30
3.7 Anticipated Project Phasing .....	3-34
3.8 Required Jurisdictional Approvals .....	3-34
4. AESTHETICS .....	4-1
4.1 Setting .....	4-1
4.2 Pertinent Plans and Policies .....	4-2
4.3 Impacts and Mitigation Measures .....	4-6
5. AIR QUALITY .....	5-1
5.1 Setting .....	5-1
5.2 Pertinent Plans and Policies .....	5-9
5.3 Impacts and Mitigation Measures .....	5-12
6. BIOLOGICAL RESOURCES .....	6-1
6.1 Setting .....	6-2
6.2 Pertinent Plans and Policies .....	6-18
6.3 Impacts and Mitigation Measures .....	6-22

7.	CLIMATE CHANGE .....	7-1
7.1	Setting .....	7-1
7.2	Pertinent Plans and Policies .....	7-5
7.3	Impacts and Mitigation Measures .....	7-13
8.	CULTURAL AND HISTORIC RESOURCES .....	8-1
8.1	Setting .....	8-1
8.2	Pertinent Plans and Policies .....	8-4
8.3	Impacts and Mitigation Measures .....	8-12
9.	GEOLOGY AND SOILS .....	9-1
9.1	Setting .....	9-1
9.2	Pertinent Plans and Policies .....	9-6
9.3	Impacts and Mitigation Measures .....	9-10
10.	HAZARDS AND HAZARDOUS MATERIALS .....	10-1
10.1	Setting .....	10-1
10.2	Pertinent Plans and Policies .....	10-4
10.3	Impacts and Mitigation Measures .....	10-8
11.	HYDROLOGY AND WATER QUALITY .....	11-1
11.1	Setting .....	11-1
11.2	Pertinent Plans and Policies .....	11-5
11.3	Impacts and Mitigation Measures .....	11-10
12.	LAND USE AND PLANNING .....	12-1
12.1	Setting .....	12-1
12.2	Pertinent Plans and Policies .....	12-5
12.3	Impacts and Mitigation Measures .....	12-7
13.	NOISE .....	13-1
13.1	Setting .....	13-1
13.2	Pertinent Plans and Policies .....	13-9
13.3	Impacts and Mitigation Measures .....	13-11
14.	POPULATION AND HOUSING .....	14-1
14.1	Setting .....	14-1
14.2	Pertinent Plans and Policies .....	14-3
14.3	Impacts and Mitigation Measures .....	14-7
15.	PUBLIC SERVICES AND UTILITIES .....	15-1
15.1	Pertinent Plans and Policies .....	15-1
15.2	Police Services .....	15-3
15.3	Fire Protection and Emergency Medical Services .....	15-6
15.4	Parks and Recreation .....	15-10
15.5	Schools .....	15-15
15.6	Water .....	15-18
15.7	Wastewater .....	15-27
15.8	Solid Waste and Recycling .....	15-30

16.	TRANSPORTATION AND CIRCULATION .....	16-1
16.1	Setting .....	16-1
16.2	Pertinent Plans and Policies .....	16-23
16.3	Impacts and Mitigation Measures .....	16-27
17.	PROJECT CONSISTENCY WITH LOCAL AND REGIONAL PLANS .....	17-1
17.1	City of Hercules General Plan .....	17-1
17.2	Waterfront District Master Plan .....	17-1
17.3	Pertinent Regional Plans .....	17-4
18.	CEQA-REQUIRED ASSESSMENT CONSIDERATIONS .....	18-1
18.1	Growth-Inducing Effects .....	18-1
18.2	Significant Unavoidable Impacts .....	18-2
18.3	Irreversible Environmental Changes .....	18-3
18.4	Cumulative Impacts .....	18-3
18.5	Effects Found Not to be Significant .....	18-4
19.	ALTERNATIVES TO THE PROPOSED PROJECT .....	19-1
19.1	Identified Alternatives .....	19-1
19.2	Comparative Environmental Evaluation .....	19-6
19.3	Conclusion: Environmentally Superior Alternative .....	19-11
20.	MITIGATION MONITORING AND REPORTING .....	20-1
20.1	Mitigation Monitoring and Reporting Requirements .....	20-1
20.2	Monitoring and Reporting Checklist Format .....	20-1
21.	ORGANIZATIONS AND PERSONS CONTACTED .....	21-1
21.1	City of Hercules .....	21-1
21.2	Applicant .....	21-1
21.3	Others .....	21-1
22.	APPENDICES .....	22-1
22.1	Notice of Preparation and Initial Study	
22.2	Water Supply Assessment (WSA)	
22.3	Supplemental Noise Information	
22.4	CEQA Standards for EIR Adequacy	
22.5	CEQA Definition of "Mitigation"	
22.6	EIR Consultant Team	

**List of Figures:**

3.1	Project Location--Hercules Bayfront Project .....	3-2
3.2	Project Site--Existing Conditions (Aerial Photograph) .....	3-5
3.3	Waterfront District Master Plan Area and Sub-Districts .....	3-8
3.4	Hercules Bayfront Project, Intermodal Transit Center Project, and Supporting Facilities/Infrastructure (Shared Components) .....	3-12
3.5	Planned Adjacent Intermodal Transit Center Project (Subject of Separate EIR) .....	3-13
3.6	Proposed Site Plan--Hercules Bayfront Project .....	3-14
3.7	Proposed Building Height Allowances--Hercules Bayfront Project .....	3-24

3.8	Proposed Street and Circulation Regulating Plan--Hercules Bayfront Project.....	3-26
3.9	Proposed Civic Space Regulating Plan--Hercules Bayfront Project.....	3-27
3.10	Proposed General Plan and Zoning Amendment Land Use Designations-- Hercules Bayfront Project.....	3-28
4.1	Proposed Building Height Allowances--Hercules Bayfront Project.....	4-8
4.2	Visual Simulation Vantage Points.....	4-12
4.3	Viewpoint 1: Main St. at Railroad Ave. Looking North--Before and After.....	4-13
4.4	Viewpoint 2: Railroad Ave. at Sycamore Ave. Looking North--Before and After.....	4-14
4.5	Viewpoint 3: Railroad Ave. Approach to Bayfront Blvd., Looking Northwest-- Before and After .....	4-15
4.6	Viewpoint 4: Promenade St. Approach to Bayfront Blvd., Looking North--Before and After.....	4-16
4.7	Viewpoint 5: Proposed Bay Trail Promenade, Looking East--Before and After .....	4-17
4.8	Viewpoint 6: Avocet Dr. at Sanderling Dr., Looking North--Before and After.....	4-18
4.9	Viewpoint 7: John Muir Parkway Approach to Project, Looking Northwest-- Before and After .....	4-19
6.1	Existing Biological Resources and Habitat Types on the Project site.....	6-5
6.2	Preliminary Wetland Delineation Map.....	6-6
6.3	Existing Wetland Features: Southwest Area.....	6-7
6.4	Existing Wetland Features--Central Area .....	6-8
6.5	Existing Wetland Features--Northeast Area.....	6-9
11.1	Storm Drainage Plan for Hercules Waterfront (A Portion of Contra Costa County Unformed Drainage Area 112).....	11-12
13.1	Noise Measurement Locations in Project Vicinity .....	13-8
16.1	Existing Roadway System and Study Intersections .....	16-2
16.2	Existing Intersection Lane Configurations.....	16-6
16.3	Existing AM (PM) Peak Hour Intersection Volumes .....	16-7
16.4	Existing Freeway Lane Configurations and Peak-Hour Volumes .....	16-10
16.5	Cumulative (2035) Intersection Lane Configurations .....	16-18
16.6	Cumulative (2035) Without Project Traffic Volumes.....	16-19
16.7	Cumulative Freeway Lane Configurations and Peak-Hour Volumes.....	16-20
16.8	Project Trip Assignment .....	16-32
16.9	Cumulative (2035) Plus Project Trip Assignment.....	16-33
16.10	Existing Plus Project Traffic Volumes .....	16-34
16.11	Cumulative (2035) Plus Project Traffic Volumes.....	16-39
16.12	Intersection Mitigation Measures .....	16-43
16.13	Weekday Month-by-Month Estimated Parking Demand.....	16-52
16.14	Weekend Month-by-Month Estimated Parking Demand .....	16-53

**List of Tables:**

1.1	Definitions of Key EIR Terminology .....	1-5
2.1	Summary of Impacts and Mitigations.....	2-5
3.1	Waterfront District Master Plan Buildout Estimate Without Project-Proposed Amendments .....	3-11
3.2	Hercules Bayfront Project: Maximum "Ground-Up" Build Out Estimate.....	3-17
3.3	Build Out Comparison: Proposed Hercules Bayfront Project and Adopted Waterfront District Master Plan .....	3-19

3.4	Allowable Building Height Comparison--Current WDMP (Including WDMP Initiative) vs. Project-Proposed WDMP Amendments .....	3-25
4.1	Allowable Building Height Comparison--Current WDMP (Including WDMP Initiative) vs. Project-Proposed WDMP Amendments .....	4-9
5.1	Federal and State Ambient Air Quality Standards.....	5-4
5.2	Summary of Air Quality Data for Hercules (San Pablo Monitoring Station), 2004-2008 .....	5-7
5.3	Summary of Measured Air Quality Exceedances.....	5-8
5.4	Daily Construction Exhaust or Evaporative Emissions from Construction of the Proposed Project.....	5-15
5.5	Future Incremental Project Emissions .....	5-20
6.1	Special-Status Species Known or With Potential to Occur in the West Hercules Vicinity.....	6-12
6.2	Known and Potential Jurisdictional Wetlands and Other Waters Located On Site and Adjacent to Railroad Right-of-Way.....	6-19
7.1	Estimated Project-Related Increases in Greenhouse Gas Emissions.....	7-17
7.2	OPR-Identified GHG Reduction Measures Reflected in the Project and Mitigation Measures .....	7-19
12.1	Waterfront District Master Plan Build-Out Estimate with Project .....	12-5
12.2	Proposed Hercules Bayfront Project: Maximum Buildout Estimate .....	12-8
12.3	Project Consistency with Hercules General Plan Land Use Element and Growth Management Element .....	12-11
12.4	Under Construction, Recently Approved and Pending Development Projects in Hercules .....	12-20
13.1	Definitions of Acoustical Terms .....	13-2
13.2	Typical Sound Levels Measured in the Environment and Industry.....	13-3
13.3	Reaction of People and Damage to Buildings from Continuous Vibration Levels.....	13-6
13.4	Summary of Long-Term and Short-Term Noise Measurements.....	13-10
13.5	Groundborne Vibration Impact Criteria .....	13-12
13.6	Construction Equipment Noise Level Ranges at 50 Feet from the Source.....	13-16
13.7	Typical Noise Level Ranges at 50 Feet, $L_{eq}$ in dBA at Construction Sites .....	13-17
14.1	ABAG-Estimated Existing and Projected Hercules and Contra Costa County Population, Housing and Job Growth, 2010-2035 .....	14-2
14.2	Regional Housing Needs Allocation (RHNA) for Hercules, 2007-2014 .....	14-7
15.1	East Bay Municipal Utility District (EBMUD) Water Demand and Supply Projections.....	15-20
16.1	Signalized Intersection Level of Service Definitions.....	16-9
16.2	Unsignalized intersection Level of Service Definitions .....	16-9
16.3	Existing High Occupancy Vehicle Information .....	16-11
16.4	Freeway Mainline and Ramp Junction Level of Service Thresholds .....	16-12
16.5	Intersection Levels of Service--Existing Conditions .....	16-14
16.6	Freeway Facility Levels of Service--Existing Conditions .....	16-15
16.7	Cumulative (2035) Without Project Intersection Operations.....	16-21
16.8	Cumulative (2035) Without Project Freeway Operations .....	16-22
16.9	ITE Project Trip Generation Equations .....	16-31
16.10	Project Trip Generation .....	16-31
16.11	Existing Plus Project Intersection Operations .....	16-35
16.12	Existing Plus Project Freeway Operations.....	16-37
16.13	Cumulative Plus Project Intersection Operations.....	16-40
16.14	Cumulative (2035) Plus Project Freeway Operations .....	16-45

16.15	WDMP Initiative Parking Requirements for the Project.....	16-50
16.16	ULI Shared Parking Ratios for the Project.....	16-50
16.17	Shared Parking Demand Summary.....	16-51
19.1	Alternatives Comparison to Proposed Project--Summary Overview.....	19-7
19.2	Trip Generation Comparison--Project vs. Project Alternatives.....	19-10
20.1	Mitigation Monitoring Checklist--Hercules Bayfront Project.....	20-3

